SOV/16-59-6-24/46

17(2,12)

AUTHOR: Shershevskaya, R.S.

TITLE: The Variation in Shigella Shigae in the Process of Their Adaptation to Antibiotics. Author's Summary.

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 6, pp 117-118 (USSR)

ABSTRACT: The author studied the variation of various strains of Shigella shigae in the course of their adaptation to the following antibiotics: synthomycin, levomycetin, streptomycin, erythromycin, biomycin, terramycin and tetracyclin. The morphological changes observed corresponded to those noted by other researchers and were most marked in the tests with synthomycin, levomycetin, streptomycin and erythromycin. The changes in the cultural properties had to do with the nature of growth in liquid and on solid media (dwarf and sister colonies) and were most often noted in synthomycin-resistant strains. Changes in the biochemical properties were observed in adaptation to all the antibiotics and were expressed by retardation or loss of the power to ferment certain carbohydrates, and also mannitol and glycerine. As far as changes in the antigen properties of the strains were concerned, the adaptation process led to a drop in

Card 1/2

The Variation in Shigella Shigae in the Process of Their Adaptation to Antibiotics. Author's Summary.

agglutinability in a linear agglutination reaction with specific sera. Even more pronounced changes were noted in reactions with monoreceptor sera. The strains retained their newly-acquired antigen features for a year (period of observation) despite frequent passages on nutrient media containing streptomycin and terramycin. The virulency of the strains for white mice also diminished through adaptation.

ASSOCIATION: Khabarovskiy meditsinskiy institut (Khabarovsk Medical Institute)

SUBMITTED: April 15, 1958

SHERSHEVSKAYA, R.S.

Crossed resistance of dysenteria bacteria to various antibiotics.
Antibiotiki 5 no. 5:86-89 S-O '60. (MIRA 13:10)

1. Kafedra mikrobiologii (zav. - prof. Ye.G. Livkina) Khabarovskogo meditsinskogo instituta.
(SHIGELLA) (ANTIBIOTICS)

SHERSHEVSKAYA, R.S.

Variability of dysenteric bacteria during the process of their adaptation to antibiotics. Trudy Khab.med.inst. no.20:33-37 '60.
(MIRA 15:10)
1. Iz kafedry mikrobiologii (zav. prof. Ye.G.Livkina) Khabarovskogo meditsinskogo instituta.
(SHIGELIA) (ANTIBIOTICS)

[redacted], N. S.

Cand Med Sci - (diss) "Study of the action of antibiotics on dysenteric bacteria." Khabarovsk, 1961. 24 pp; (Khabarovsk State Med Inst); 250 copies; price not given; (KL, 7-61 sup, 263)

SHERSHNEVSKAYA, K.S.

Antigenic variability of dysentery bacteria under the influence of antibiotics. Antibiotiki 9 no.7:637-641 Jl '64.
(MIRA 18:3)

1. Kafedra mikrobiologii (zav. - prof. Ye.G. Livkina) Khabarovskogo meditsinskogo instituta.

SHERSHNEVSKAYA, S. F.

Cand Med Sci - (diss) "Action on the eye of intra-ocular fragments of several non-ferrous alloys. (Experimental study)." Stalingrad, 1961 - inserted by translator, assumed as correct. 21 pp; (Stalingrad State Med Inst); 200 copies; free; (KL, 6-61 sup, 242)

SHERSHEVSKAYA, S.F.

Peculiarities of the histomorphological reaction of eye tissues to intraocular fragments of some non-ferrous alloys. Oft.zhur. 15 no.1:10-14 '60. (MIRA 13:5)

1. Iz eksperimental'noy laboratorii Stalinskogo instituta usovershenstvovaniya vrachey.
(EYE--FOREIGN BODIES)

SHERSHEVSKAYA, S.F.

Chalcosis in the presence of intraocular bronze fragments (experimental histochemical investigations. Vest. oft. 73 no. 2:3-7 Mr-Ap '60.
(MIRA 14:1)

(EYE—FOREIGN BODIES) (COPPER—TOXICOLOGY)

SHERSHEVSKAYA, Ye.Ya.

Anatomy of three species of Cyrpipedium. Bot. zhur. 48 no.11: 1692-1696 N '63. (MIRA 17:4)

1. Tomskiy meditsinskiy institut.

SHERSHEVSKIY, A.M.; DULOV, A.V.

I.P. Merzheevskii in the medical council. Zhur. nevr. i psikh 59 no.3: 360-361 '59 (MIRA 12:4)

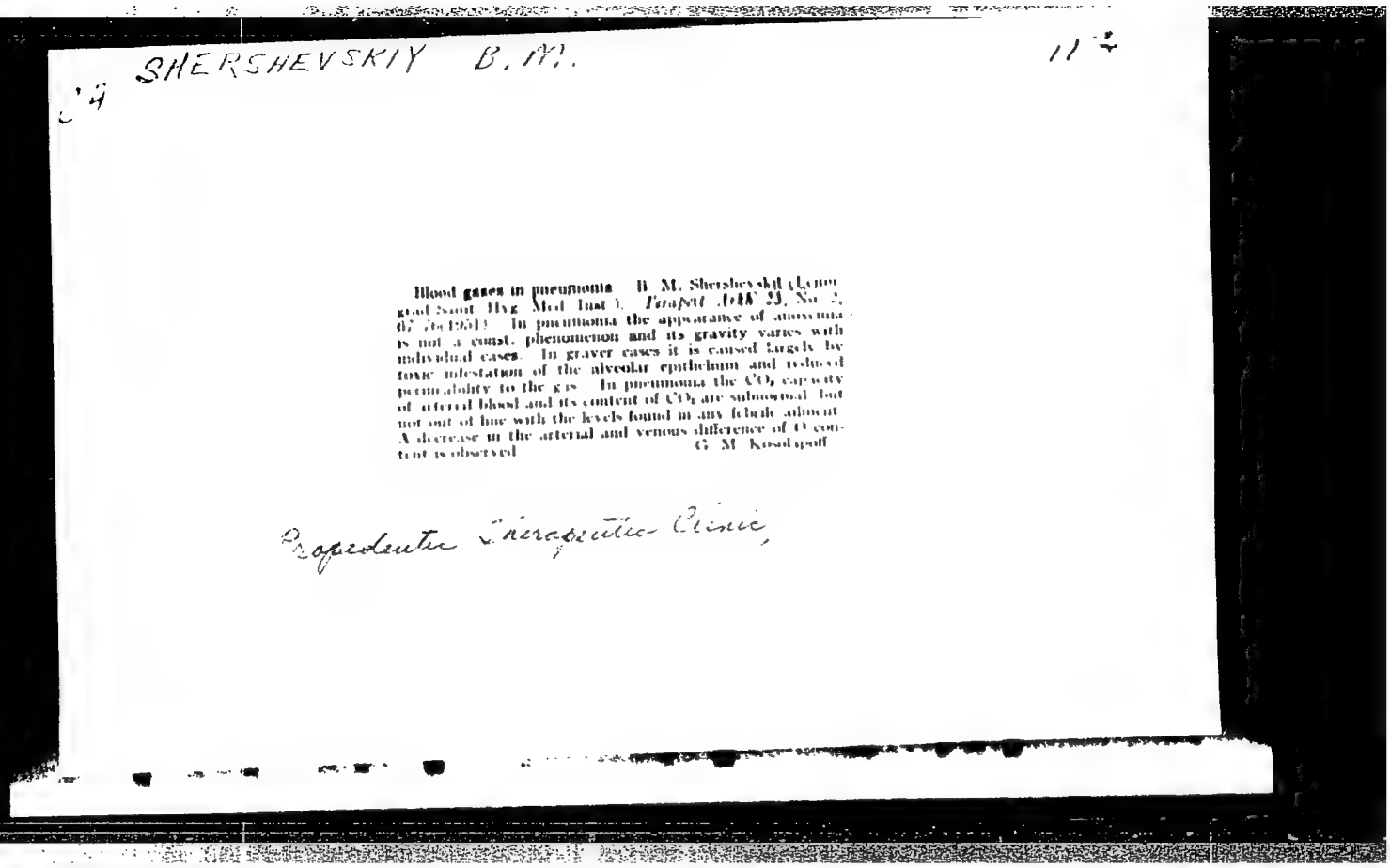
1. Kafedra psikhiatrii (nachal'nik - prof. A.S. Chistovich) Voyenno-meditsinskiy ordena Lenina akademii imeni S.M. Kirova.

(BIOGRAPHIES,
Merzhevskii, Ivan P. (Rus))

SHERSHEVSKIY, A.M.; GERSHKOVICH, B.Ya.; BUTENKO, L.I., red.; STEBLYANKO, T.B., tekhn. red.

[Two worlds and two different courses; socialist and capitalist roads of the development of agriculture] Dva mira - dva puti; o sotsialisticheskom i kapitalisticheskom putiakh razvitiia sel'skogo khoziaistva. Stavropol', Stavropol'skoe knizhnoe izd-vo, 1960. 149 p. (MIRA 14:11)

(Agriculture) (United States--Agriculture)



SHERSHEVSKIY B. M.

11

Blood gases in pneumonia. B. M. Shershevskii (Leningrad Sanit. Hyg. Med. Inst.). *Terapevt. Arkh.* 23, No. 2, 67-76 (1951). In pneumonia the appearance of anoxemia is not a const. phenomenon and its gravity varies with individual cases. In graver cases it is caused largely by toxic infestation of the alveolar epithelium and reduced permeability to the gas. In pneumonia the CO_2 capacity of arterial blood and its content of CO_2 are subnormal but not out of line with the levels found in any febrile ailment. A decrease in the arterial and venous difference of O content is observed. G. M. Kosolapoff

Propedeutic Therapeutic Clinic

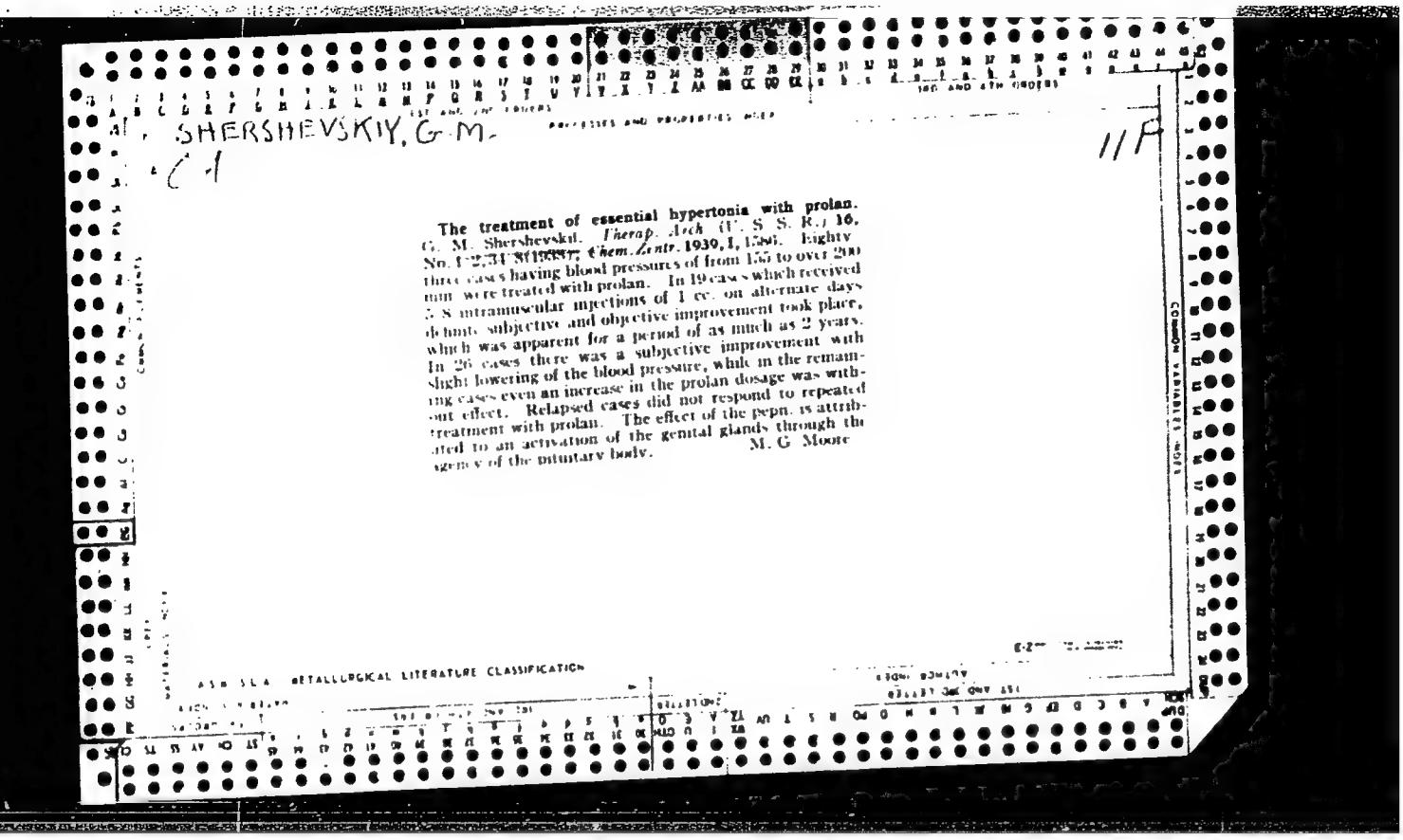
SHERSHEVSKIY, B. M.; AFANAS'YEVA, Ye. K.

Role of massive bloodletting in the treatment of cardiac insufficiency. Klin. med., Moskva 29 no.7:38-43 July 1951. (CIML 21:1)

1. Docent Shershevskiy. 2. Of the Propedeutic Therapeutic Clinic (Head -- Prof. S. M. Ryss), Leningrad Sanitary-Hygienic Medical Institute (Director -- Prof. D. A. Zhdanov, Corresponding Member of the Academy of Medical Sciences USSR).

SHERSHEVSKIY, B.M.

[Blood gases in diseases and wounds of the respiratory organs] Gazy krovi pri zabolevaniiakh i raneniiakh apparata dykhaniia. Tomsk, Izd-vo Tomskogo univ., 1959. 209 p. (MIRA 13:11)
(BLOOD, GASES IN)
(RESPIRATORY ORGANS--DISEASES)



SHERSHEVSKIY, G.M.

C-1

II-A

The treatment of essential hypertonia with prolan. G. M. Shershevskil. *Therap. Arch.* (U. S. S. R.) 10, No. 1-2, 34-38 (1938); *Chem. Zentr.* 1939, I, 1581. Eighty-three cases having blood pressures of from 155 to over 200 mm. were treated with prolan. In 19 cases which received 5 S intramuscular injections of 1 cc. on alternate days definite subjective and objective improvement took place, which was apparent for a period of as much as 2 years. In 26 cases there was a subjective improvement with slight lowering of the blood pressure, while in the remaining cases even an increase in the prolan dosage was without effect. Relapsed cases did not respond to repeated treatment with prolan. The effect of the prepn. is attributed to an activation of the genital glands through the agency of the pituitary body. M. G. Moore

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

SHERSHEVSKIY, G.M.

Treatment of hyperthyreosis with methyl thiouracil. Ter. arkh. 23 no.3:47-51 May-June 1951. (CLML 20:11)

1. Of the Therapeutic Clinic, Novosibirsk Institute for the Advanced Training of Physicians. 2. Prof. Shershevskiy.

SHERSHEVSKIY, G.M.

USSR

The sugar tongue-test as a new method of study of carbohydrate metabolism in the clinic. G. M. Shershevskil. *Terap. Arkh.* 27, No. 3, 79-86(1955).—This method permits the study of the effect of nerve complexes upon carbohydrate metabolism before the carbohydrate is absorbed by the digestive system. The following technique was used. The patient's blood is examd. twice at 10-min. intervals for sugar; a lump of sugar is placed on the tongue and kept there for 5 min.; the blood is then tested twice at 15-min. intervals and 4 times at 30-min. intervals. The blood sugar level of healthy persons and nondiabetic patients remains either unchanged or is slightly elevated for a short period. The blood sugar level of diabetic persons is distinctly decreased for a considerable period. The glycemic curve is different from the one obtained after ingestion of sugar.
A. S. Mirkin

Therapeutic Clinic, Stalin Inst for Adv Tr-g Physicians

ALEKSEYEV, G.A., prof.; BAGDASAROV, A.A., prof.[deceased]; BEYYER, V.A., prof.; VOGRALIK, V.G., prof.; DEMIDOVA, A.V., kand. med. nauk; DUL'TSIN, M.S., prof.; ZAKHARIEVSKIY, Ye.B., prof.; KONCHALOVSKAYA, N.M., prof.; KASSIRSKIY, I.A., prof.; KOST, Ye.A., prof.; LOGINOV, A.S., kand. med. nauk; NESTEROV, V.S., prof.; SHERSHEVSKIY, G.M., prof.; YANOVSKIY, D.N., prof.; MYASNIKOV, A.L., prof., otv. red.; TAREYEV, Ye.M., prof., am. otv. red.; SHAPIRO, Ya.Ye., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Multivolume manual on internal diseases]Mnogotomnoe rukovodstvo po vnutrennim boleznian. Otv.red. A.L.Miasnikov. Moskva, Medgiz. Vol.6. [Diseases of the blood system and hemopoietic organs]Bolezni sistemy krovi i krovotvornykh organov. 1962. 700 p. (MIRA 15:12)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Bagdasarov, Myasnikov, Tareyev). 2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Kassirskiy).
(BLOOD—DISEASES)
(HEMOPOIETIC SYSTEM—DISEASES)

SHERSHEVSKIY, M.G.

Effect of iodine, estrogens and lipocaine on ketone bodies in the blood in atherosclerosis before eating and after eating fats. Terap. arkh. 30 no.4:41-45 Ap '58. (MIRA 11:4)

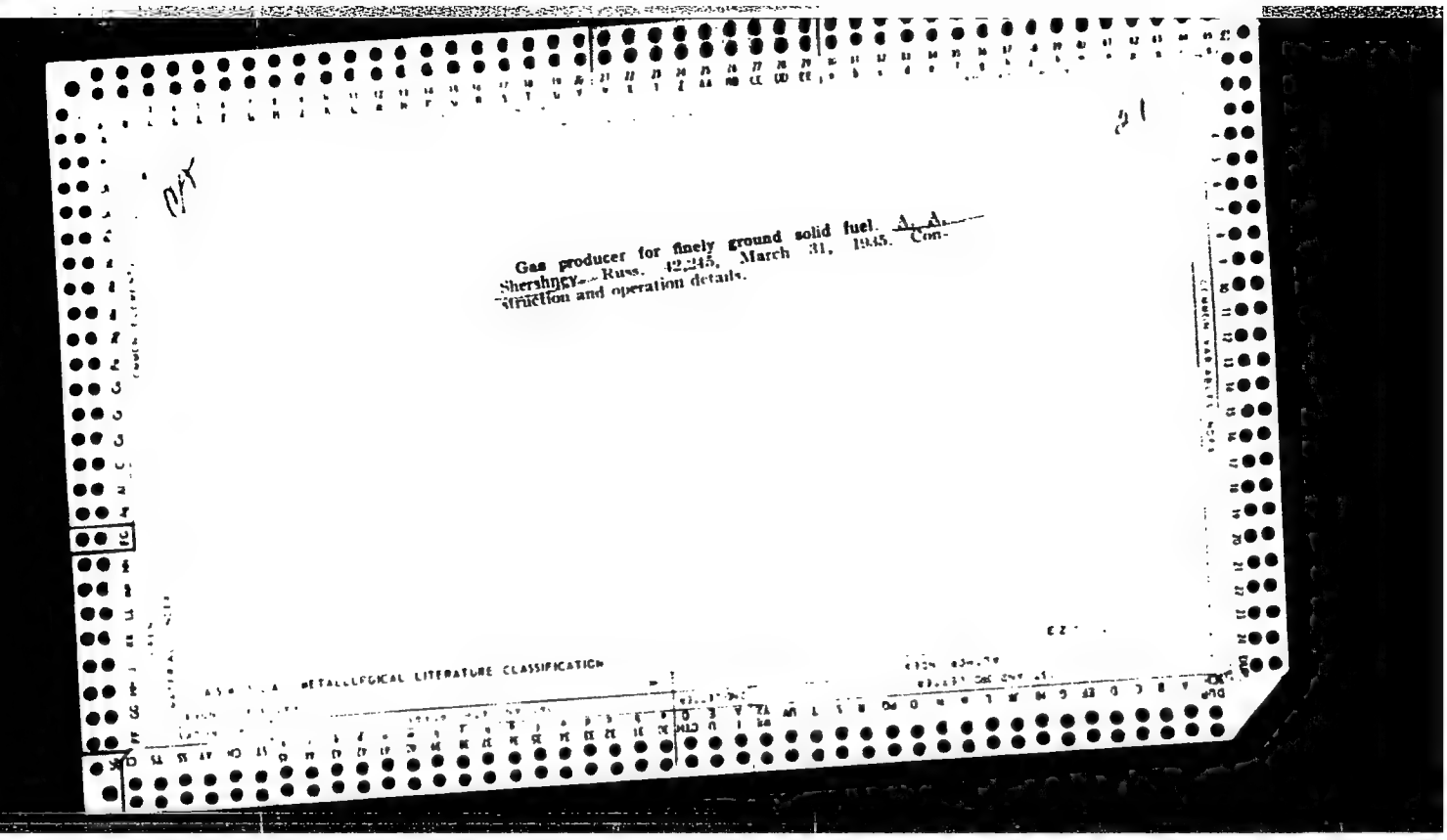
1. Iz bol'nitsy No.23 v Stalinske (glavnyy vrach R.F. Uspenskaya) i terapevticheskoy kliniki (zav. klinikoy i konsul'tant bol'nitsy prof. G.M.Shershevskiy) Stalinskogo instituta usovershenstvovaniya vrachey.

(KETONE BODIES, in blood,
in arteriosclerosis, eff. of estrogens, iodine & lipocaine on preprandial level & changes after fatty meal (Rus)
(ARTERIOSCLEROSIS, blood in,
ketone bodies, eff. of estrogens, iodine & lipocaine on preprandial level & on changes after fatty meal (Rus)
(ESTROGENS, effects,
on blood ketone bodies in arteriosclerosis before meal & after fatty load (Rus)
(IODINE, effects, same)
(LIPOCAIC, effects,
same)

SHERSHEVSKIY, M.G.

Influence of vitamin B_{12} on fibrinolysis in atherosclerosis. Terap. arkh. 35 no.2:58-60'63. (MIRA 16:10)

1. Iz 2-y kafedry terapii (zav. G.A.Gol'dberg) Novokuznetskogo instituta usovershenstvovaniya vrachey (rektor G.L.Starkov).
(CYANOCOBALAMINE) (ARTEIOSCLEROSIS)
(FIBRINOLYSIS)



Gas producer for finely ground solid fuel. A. A. Shershnev. Russ. 42,245, March 31, 1945. Construction and operation details.

METALLURGICAL LITERATURE CLASSIFICATION

SHERSHNEV, A.A., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk; POMERANTSEV, V.V., kandidat tekhnicheskikh nauk, retsenzent; BARSHTEYN, I.K., kandidat tekhnicheskikh nauk, redaktor.

[Pneumatic furnaces for low-capacity boilers] Pnevmaticheskie topki TsKTI sistemy Shershneva dlia kotlov maloi moshchnosti. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 101 p. (MLRA 7:6)

(Furnaces)

SHERSHNEV, A.D.

62

2743. FIRING OF WOOD WASTE IN TSKTI SHERSHNEV PNEUMATIC FURNACES, Shershnev, A.D. (Energetik (Pwr Engr, Moscow), Apr. 1954, 26-30). A description and performance figures are given for a furnace which can be used with locomotive type, Lancashire and other boilers. It can also be fired with peat or brown coal. The furnace is in the shape of a W in section. Fuel arrives through a drum feeder at the top of the left hand arm of the W and is met by a blast of air from the boiler, where there is a grate for large pieces of fuel and for starting up. Small particles burn in suspension, are carried over into the right hand V to complete their combustion and the gases go on through the boiler. If air is preheated, wood waste with a moisture content of 57-60% can be burned continuously. (L).

AID P - 2986

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 1/28

Author : Shershnev, A. A., Kand. of Tech. Sci.

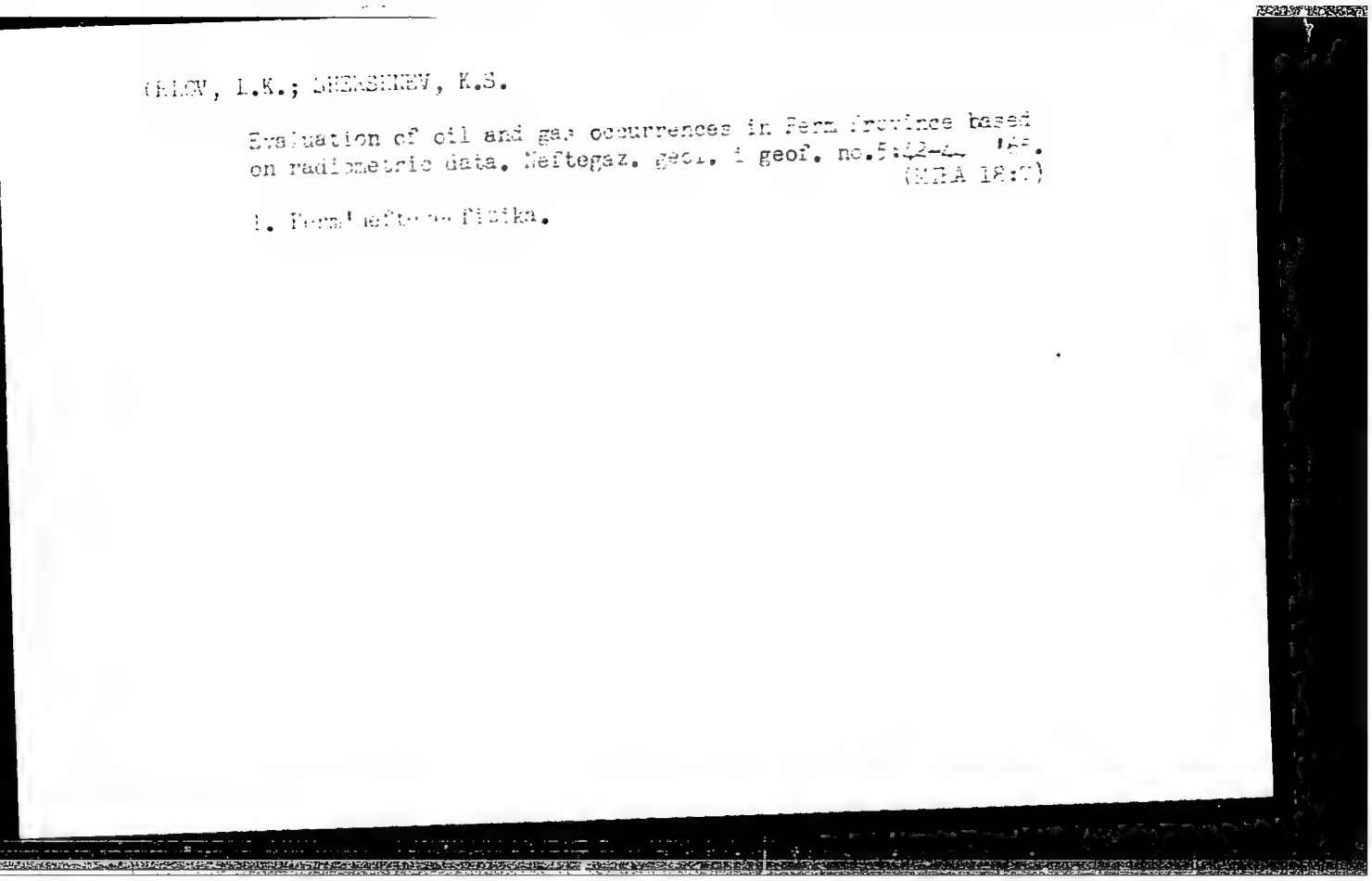
Title : Burning of Ukrainian lignites in pneumatic furnaces of the TsKTI (Central Scientific Research Institute for Boilers and Turbines)

Periodical : Energetik, 6, 1-4, Je 1955

Abstract : The author describes the characteristics of the Ukrainian lignites mined in Aleksandriya, Korostyshev and Zolochev and **burned experimentally** in the Klintsovo Plant and Steam Electric Power Station. The pneumatic furnaces used were of the Shershnev system and the two-drum boilers were of the NZL type. The author describes in detail the results obtained and concludes that they were satisfactory. Three drawings and diagrams.

Institution : None

Submitted : No date



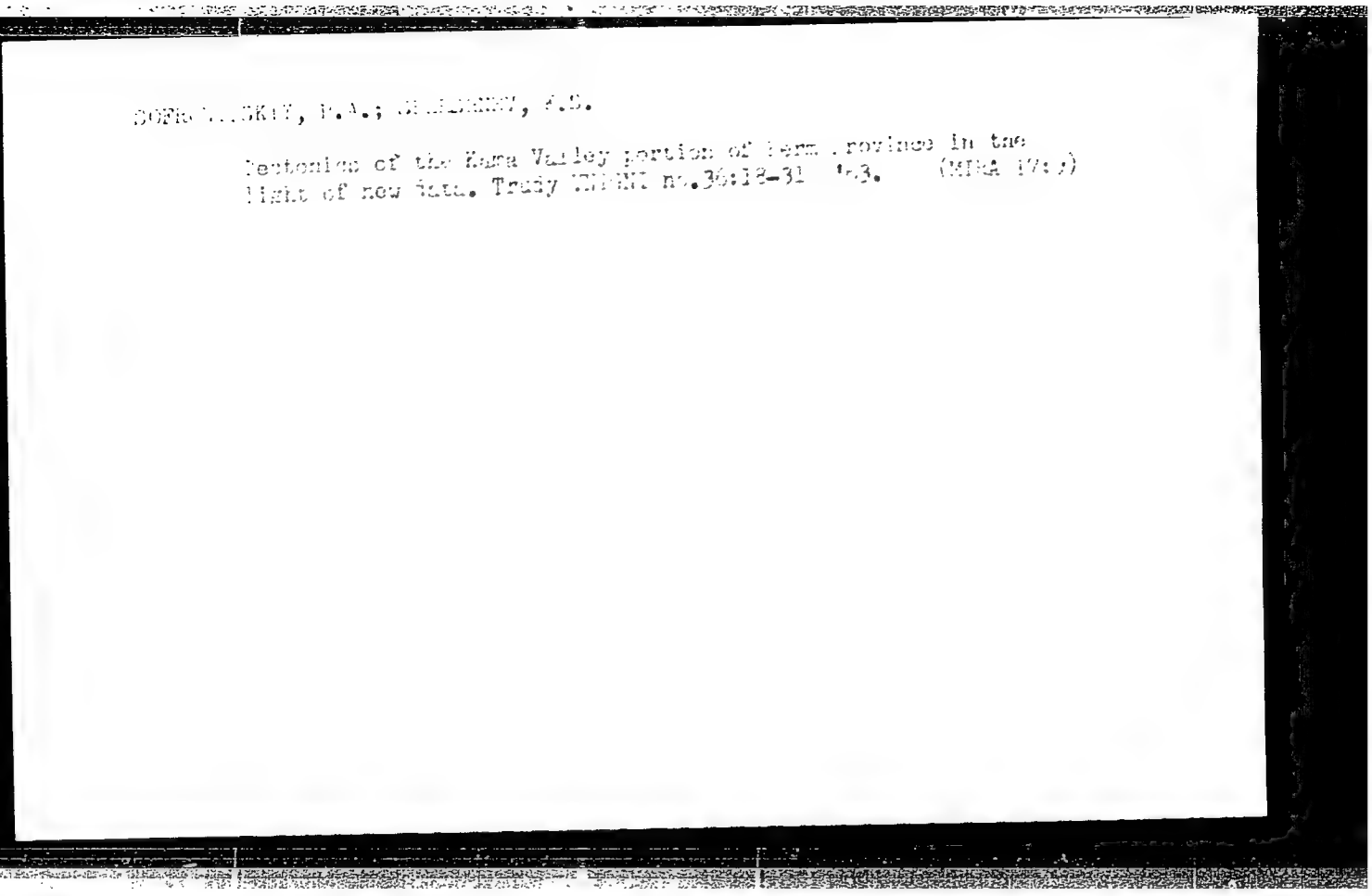
(KLOV, I.K.; SHENSHNEV, K.S.

Evaluation of oil and gas occurrences in Perm Province based on radiometric data. Neftegaz. geol. i geof. no.5:42-4 '65. (MIRA 18:8)

1. Permskiy neftyanoy institut.

SAFONOVA, T.P.; SHERSHNEV, K.S.

Stratigraphy and paleogeography of terrigenous sediments in the lower Carboniferous in the Kama portion of Perm Province. Trudy VNIGNI no.13:132-145 '59. (MIRA 13:1)
(Perm Province--Geology, Stratigraphic)
(Perm Province--Paleogeography)



[illegible]SKIY, P.A.; [illegible], A.S.

Tectonics of the Kura Valley portion of Iran province in the light of new data. Trudy VNIGNI no.36:18-31 '63. (MIRA 17:7)

AUTHOR: SHERSNEV,M. 42-5-14/17

TITLE: Characterization of the Dimension of Metric Spaces by Continuous Mappings Into Euclidean Spaces (Kharakterizatsiya razmernosti metricheskikh prostranstv posredstvom nepreryvnykh otobrazheniy v evklidovy prostranstva)

PERIODICAL: Uspekhi Mat.Nauk, 1957, Vol. 12, Nr.5, pp. 245-248 (USSR)

ABSTRACT: Let R be an n-dimensional metric space and E^k a k-dimensional Euclidean space. Let $C(R,E^n)$ be the space of all bounded mappings of R into E^n.
Theorem: For every R and every $k \leq n$, the set of all (n-k)-dimensional mappings of R into E^n is everywhere dense in the space $C(R,E^n)$.
Five Soviet references are quoted.

SUBMITTED: October 18, 1956
AVAILABLE: Library of Congress

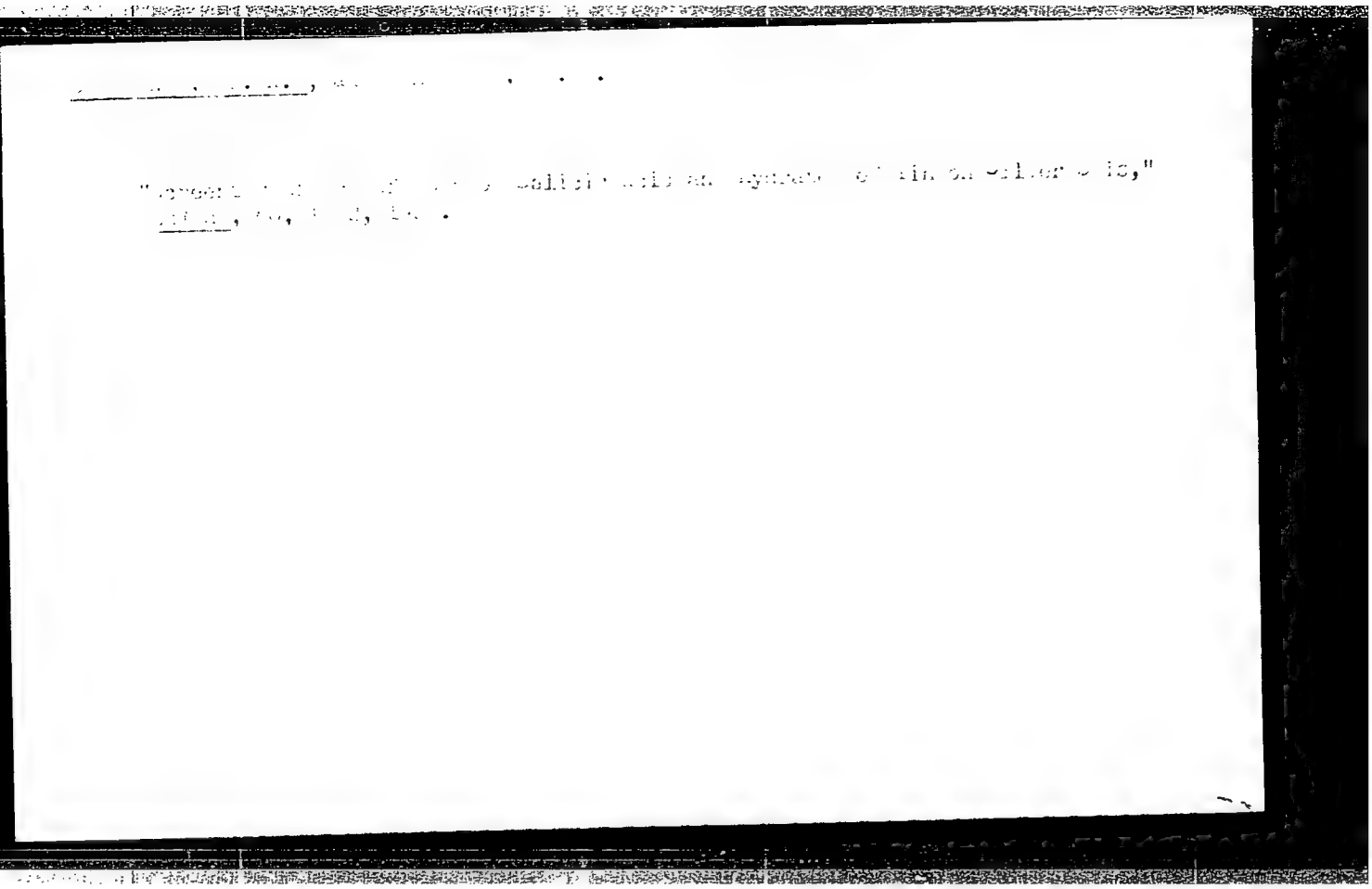
1. Topology 2. Conformal mapping

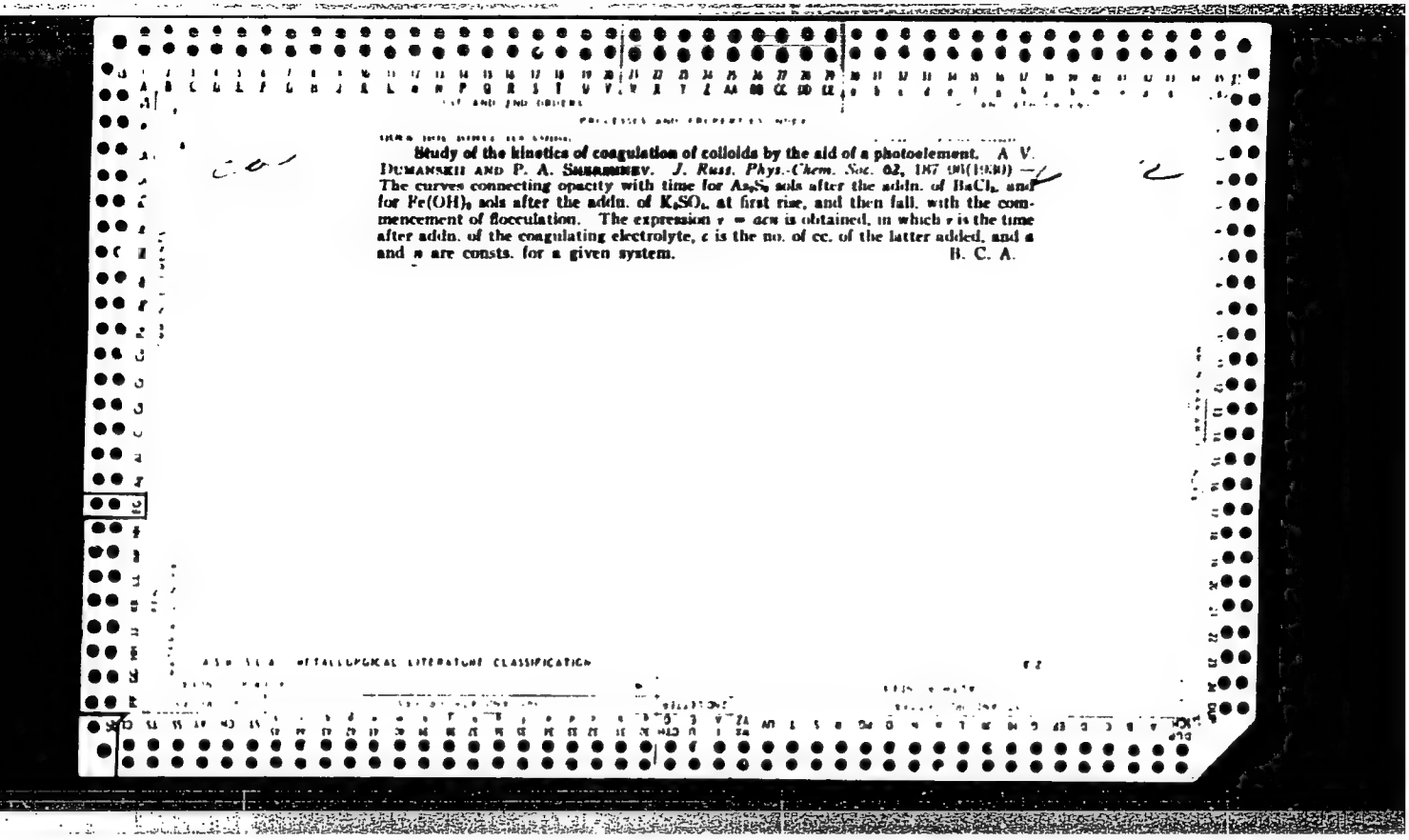
Card 1/1

TATUNIN, A.T., nauchn. sotr.; MANILOVA, A.Z., nauchn. sotr.; ROVNYY, A.A., nauchn. sotr. Prinimali uchastiye: KOZ'MIN, Yu.G.; RAYNEN, Z.V.; SHEBYAKIN, O.S.; BELOGOLOVYY, A.A.; KHARO, Ye.N.; SHERSHNEV, N.N.; NEKLEPAYEVA, Z.A., red.

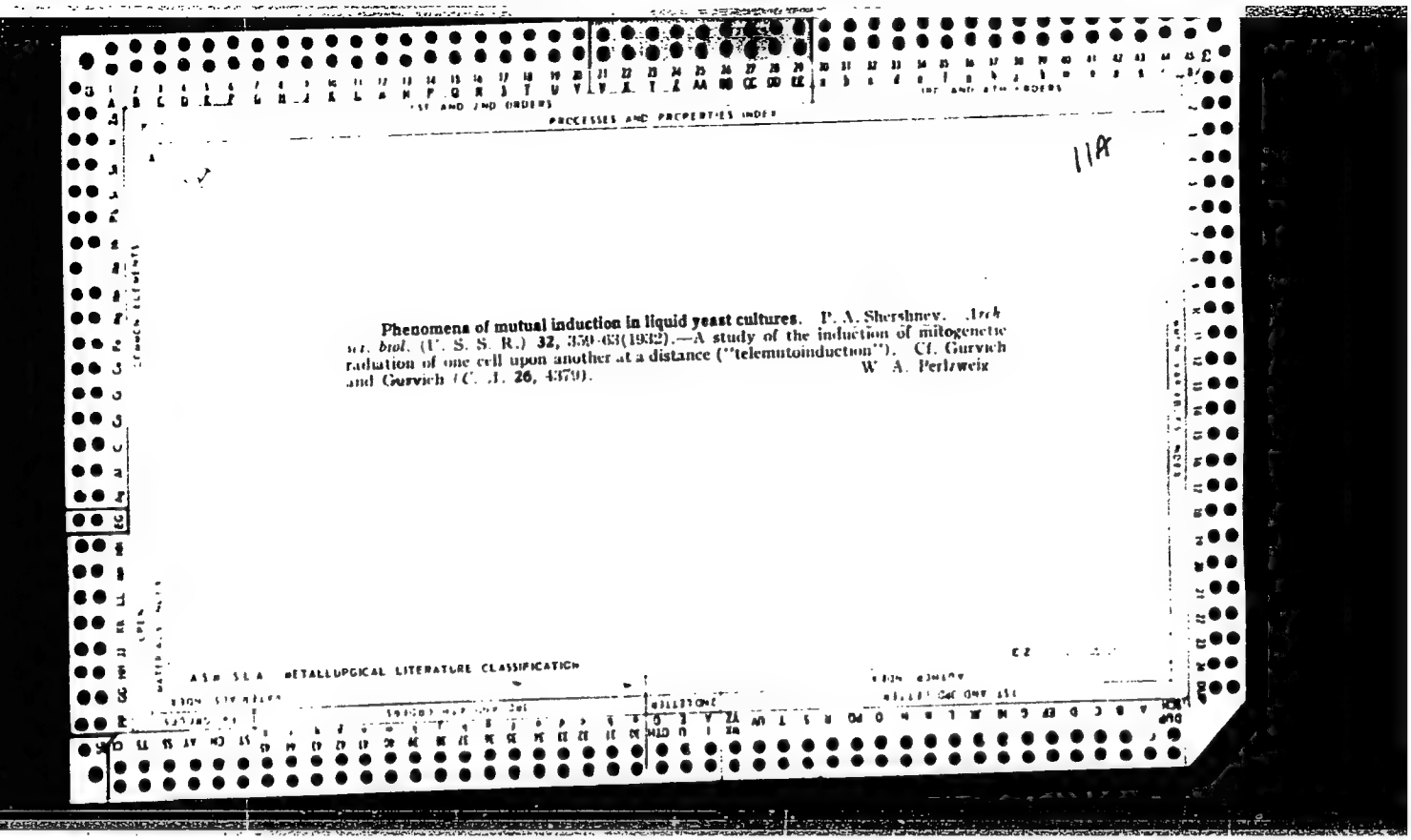
[Guide for the determination of the load capacity of metal spans of railroad bridges] Rukovodstvo po opredeleniiu gruzopod"emnosti metallicheskikh proletnykh stroenii zheleznodorozhnykh mostov. Moskva, Transport, 1965. 255 p. (MIRA 18:10)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye puti i sooruzheniy. 2. Nauchno-issledovatel'skiy institut mostov Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta (for Tatunin, Manilova, Rovnyy,





Study of the kinetics of coagulation of colloids by the aid of a photoelement. A. V. DUMANSKII AND P. A. SHEREMETEV. *J. Russ. Phys.-Chem. Soc.* 62, 187-90(1930). — The curves connecting opacity with time for As_2S_3 sols after the addn. of $BaCl_2$ and for $Fe(OH)_3$ sols after the addn. of K_2SO_4 at first rise, and then fall, with the commencement of flocculation. The expression $\tau = ac^n$ is obtained, in which τ is the time after addn. of the coagulating electrolyte, c is the no. of cc. of the latter added, and a and n are consts. for a given system. B. C. A.

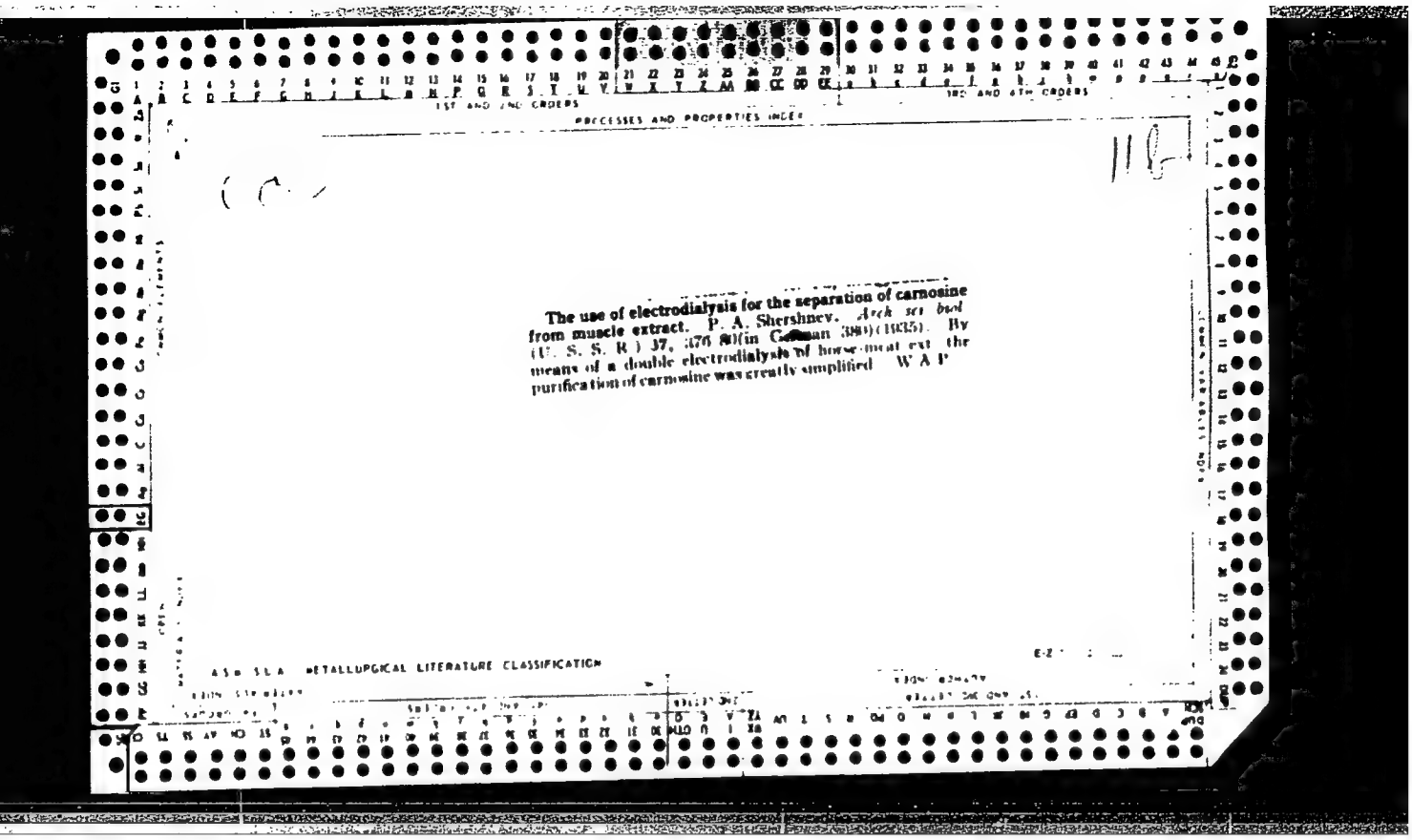


PROCESSES AND PROPERTIES INDEX

11A

Phenomena of mutual induction in liquid yeast cultures. P. A. Shershnev. *Arch. sci. biol.* (U. S. S. R.) **32**, 359-63(1932).—A study of the induction of mitogenetic radiation of one cell upon another at a distance ("telemutoinduction"). Cf. Gurvich and Gurvich (*C. A.* **26**, 4379). W. A. Perlzweig

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The use of electrodialysis for the separation of carnosine from muscle extract. P. A. Shershnev. *Arch sci biol* (U. S. S. R.) 37, 376-80(in German 380)(1935). By means of a double electrodialysis of horse-meat ext. the purification of carnosine was greatly simplified. W. A. P.

SHERSHNEV, P.A.

Using animal membranes in dialysis and concentration of serums; from laboratory practice. Izv. Irk.gos.protivochum. inst. 9:87-90 '51. (MIRA 10:12)

1. Iz syvorotochnogo otdela (zav. L.Ye.Khundanov) Irkutskogo gosudarstvennogo nauchno-issledovatel'skogo protivochumnogo instituta (direktor - N.D.Altareva)
(DIALYSIS) (SERUM)

SHERSHNEV, P.A.

Variation of the fractional composition of proteins in antiplague serum producers. Izv. Irk.gos. protivochum. inst. 12:126-129 '54.
(BLOOD PROTEINS) (SERUM) (MIRA 10:12)
(HORSES)

SHORSHNOV, P.A.; SHKURKO, Ye.D.; LYASKOVSKAYA, Ye.I.; KHUNDANOV, L.Ye.

Purification and concentration of antiplague sera with neutral salts. Tez.i dokl.konf.Irk.gos.nauch.-issl.protivochum.inst. no.1:45-46 '55. (MIRA 11:3)

(PLAGUE) (SERUM)

KHUNDANOV, L.Ye.; SHERSHNEV, P.A.; SHKURKO, Ye.D.; KALMYKOVA, A.P.; TOKAREVA, A.A.; MIKHAILOVA, V.Ya.; LYASKOVSKAYA, Ye.I.

Therapeutic and prophylactic properties of separate protein fractions of plague serum. Tez. i dokl.konf.Irk.gos.nauch.-issl.protivochum. inst. no.2:69-70 '57. (MIRA 11:3)
(SERUM) (PLAGUE) (PROTEINS)

SHERSHNEV, P.A.

Comparative evaluation of various methods of purifying and concentrating antiplague sera. Izv.Irk.gos.nauch.-issl. protivochum.inst. 14:188-206 '57. (MIRA 13:7)
(SERUM) (PLAGUE)

SHERSHNEV, P.A., Cand Biol Sci -- (diss) "Comparative evaluation of various methods of purifying and concentration of antiplague sera." Irkutsk, 1958, 17 pp. One sheet of tables (Min of Health RSFSR. Perm State Med Inst) 200 copies (KL, 32-58, 107)

TOKAREVA, A.A.; SHERSHNEV, P.A.

Some remakrs on a method for the paper electrophoresis of blood proteins. Izv.Irk.gos.nauch.-issl.protivochum.inst. 18:15-23 '58. (MIRA 13:7)

(PAPER ELECTROPHORESIS) (BLOOD PROTEINS)

SHERSHNEV, P.A.; TOKAREVA, A.A.; KALMYKOVA, A.P.; SHKURKO, Ye.D.; KHUNDANOV, L.Ye.

Study of protein fractions of antiplage sera. Izv.Irk.gos. nauch.-issl.protivochum.inst. 18:25-31 '58. (MIRA 13:7)
(BLOOD PROTEINS) (PLAGUE)

KHUNDANOV, L.Ye.; SHERSHNEV, P.A. SHKURKO, Ye.D.; KALMYKOVA, A.P.; TOKAREVA, A.A.; LYASKOVSKAYA, Ye.I.; MIKHALEVA, V.Ya.

Therapeutic and prophylactic properties of individual protein fractions of antiplague serum. Izv.Irk.gos.nauch.-issl.protivochum.inst. 18:33-41 '58. (MIRA 13:7)
(BLOOD PROTEINS) (PLAGUE)

KHUNDANOV, L.Ye., SHERSHNEV, P.A., SHKURKO, Ye.D., KALMYKOVA, A.P., TOKAREVA, A.A., LYASKOVSKAYA, Ye.I. MIKHALEVA, V.Ya.

Therapeutic and preventive properties of separate protein fractions of anti-plague serum. Zhur.mikrobiol.epid. i immun. 29 no.7:55 Jl'58 (MIRA 11:8)

1. Iz Irkutskogo nauchno-issledovatel'skogo instituta Ministerstva zdravookhraneniya SSSR.

(PLAGUE, immunology,
ther. & prev. properties of beta & gamma globulins in immune sera (Rus))
(GAMMA GLOBULIN,
in anti-plague serum, ther. & prev. properties (Rus))

NIKITIN, A.I., prof., otv.red.; DOBYCHIN, B.D., prof., zam.otv.red.; ABRAMOV, K.T., kand.med.nauk, red.; KAZANTSEV, A.I., prof., red.; TIMOFEYEV, S.I., prof., red.; KHODOS, Kh.B., prof., red.; BOLOTOV, M.P., prof., red.; SHERSHNEV, P.A., prof., red.; VAYS, S.I., prof., red.; KLIMOV, K.A., dotsent, red.; SEMENOV, V.V., dotsent, red.; DONSKOV, V.V., dotsent, red.; KARNAKOV, B.I., dotsent, red.; KRAKAU, S.I., red.

[Collection of works of the Irkutsk State Medical Institute devoted to its 40th anniversary] Sbornik trudov Irkutskogo gosudarstvennogo meditsinskogo instituta, posviashchennyi 40-letiiu so dnia ego osnovaniia. Irkutsk, 1959. 442 p. (MIRA 14:1)

1. Russia (1917- R.S.F.S.R.) Ministerstvo zdarvookhraneniya. 2. Zaveduyushchiy kafedroy normal'noy fiziologii Irkutskogo meditsinskogo instituta (for Nikitin). 3. Zaveduyushchiy fakul'tetskoy khirurgicheskoy klinikoy Irkutskogo gosudarstvennogo meditsinskogo instituta (for Dobychin). 4. Zaveduyushchiy kafedroy biokhimii Irkutskogo meditsinskogo instituta (for Shershnev). 5. Zaveduyushchiy kafedroy propedevtiki vnutrennikh bolezney Irkutskogo meditsinskogo instituta (for Karnakov).

(MEDICINE)

17(2,3) SOV/16-59-9-37/47

AUTHOR: Shershnev, P.A.

TITLE: The Purification and Concentration of Plague Antisera by Using Magnesium Sulfate

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 9, pp 131 (USSR)

ABSTRACT: An attempt was made to purify and concentrate plague antisera by using magnesium sulfate. To this end the albumin fraction was removed from the sera by precipitating the globulins with crystalline 70% magnesium sulfate with subsequent hydrodialysis. The purified antisera were tested and found to have increased their gamma-globulin content to 60 - 70% and decreased their ballast protein content (albumins) to 5 - 6%. The purified sera caused a lesser anaphylactic effect than crude sera and their pyrogenicity did not exceed established norms. The efficacy of the serum was more than tripled and the dose needed for treatment could therefore be cut.

Card 1/2

SOV/16-59-9-37/47

The Purification and Concentration of Plague Antisera by Using Magnesium Sulfate

ASSOCIATION: Irkutskiy nauchno-issledovatel'skiy institut Ministerstva zdravookhraneniya SSSR (Research Institute of the Ministry of Public Health of the USSR, Irkutsk)

SUBMITTED: May 20, 1958

Card 2/2

NIKITIN, A.I., prof., otv. red.; DOBYCHIN, B.D., prof., zam. otv. red.; ABRAMOV, K.T., dots., red.; KAZANTSEV, A.I., prof., red.; TIMOFEYEV, S.I., prof., red.; KHODOS, Kh.B., prof., red.; LOLOTOV, M.P., prof., red.; SHERSHNEV, F.A., prof., red.; VAYS, S.I., prof., red.; KLIMOV, K.A., dots., red.; SEMENOV, V.V., dots., red.; KARNAKOV, B.I., dots., red.;

[Materials on the influence of physical, chemical and biological factors on the animal and human organism]Materialy o vliianii fizicheskikh, khimicheskikh i biologicheskikh faktorov na organizm zhivotnykh i cheloveka. Irkutsk, 1961. 317 p. (MIRA 15:12)

1. Irkutsk. Gosudarstvennyy meditsinskiy institut. 2. Zaveduyushchiy kafedroy terapevticheskoy stomatologii Irkutskogo meditsinskogo instituta (for Vays). 3. Zaveduyushchiy kafedroy fakul'tetskoy khirurgii Irkutskogo meditsinskogo instituta (for Dobychin). 4. Zaveduyushchiy kafedroy infektsionnykh bolezney Irkutskogo meditsinskogo instituta (for Karnakov). 5. Zaveduyushchiy kafedroy normal'noy fiziologii Irkutskogo meditsinskogo instituta (for Nikitin).
(PHYSIOLOGY, PATHOLOGICAL)

DOMARADSKIY, I.V.; MAKAROVA, L.K.; AZARGINOVA, F.S.; SHCHEKUNOVA, Z.I.; SHERSHNEV, P.A.

Immunological effectiveness of a lysed cholera vaccine. Dokl. Irk. gos. nauch.-issl. protivochum. inst. no.5:61-66 '63 (MIRA 18:1)

SHERSHNEV, S.T., inzhener

Designing protective shells for nuclear reactors. Sbor. trud. MISI no.36:101-119 '61. (MIRA 14:7)
(Nuclear reactors
(Shielding (Radiation))

S/124/62/000/005/046/048
D251/D308

AUTHOR: Shershnev, S.T.

TITLE: Calculating the protecting shells of nuclear reactors

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 5, 1962, 14, abstract 5V86 (Sb. Tr. Mosk. inzh.-stroit. in-t, 1961, no. 36, 101-119)

TEXT: A short description is given of the reasons for breakdown and a calculation of the strength of the protecting shells of nuclear reactors. The generally-known differential equations and the relationships of the momental theory of thin shells is described. The stress component in shells built in the form of surfaces with positive Gaussian curvature are divided into two groups: 1) A local stress with a large coefficient of variation and 2) a tangential or momentless component; for such shells a method is indicated of finding the forces, moments and deformations. An example is given of the calculation of a nuclear reactor's protecting shell which has the form of a hemisphere and is supported by hinges on the contour. 4 references. [Abstractor's note: Complete translation]

Card 1/1

AUTHOR: - Shershnev, V. A. SOV/138-58-11-10/14

TITLE: Determination of Thiuram and its Conversion Products by Conductiometric Titration (Opredeleniye tiurama i produktov yego prevrashcheniya metodom kondukto-metricheskogo titrovaniya)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 11, pp 33 - 34 (USSR)

ABSTRACT: Conductiometric titration is used for determining vulcanisation accelerators, especially thiurams. Scheele et al. (Refs. 1 and 2) did not describe the apparatus they used for these investigations. The author used Scheele's method. A Wheatstone bridge with a telephone or galvanometer was used (Fig.1). Three coils of 5000, 500 and 100 ohms were used instead of a slide wire. The A.C. galvanometer VG was used as zero-instrument. A beaker was used as electrolytic cell in which the platinum wire electrodes were submerged. The solution is added dropwise through an opening in the lid and the beaker is shaken. Tetramethyl thiuram disulphide was titrated in a 0.1 N $CuSO_4$ solution in the presence of hydroquinone and dithiocarbamates in a 0.1 N HCl solution. Titration curves are shown in Fig.2. Scheele et al. recommended to titrate in water-acetone solutions

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Determination of Thiuram and its Conversion Products by Conductiometric Titration

at 40°C. The authors found, however, that an 8% error occurred at this temperature which could be decreased to 2 - 3% at 25°C. Results of these experiments are tabulated (Table 1 and 2). A formula for the qualitative calculation of the analysed substances is given. Details of a simultaneous titration of zinc dithiocarbamate and thiuram in the same test tube are described. This method was also used for the determination of thiuram and zinc dithiocarbamate in vulcanisation extracts. It was found that when the vulcanisation process lasted for a considerable time, free thiuram was decomposed during the extraction process. Vulcanisates of natural rubber containing stearic acid were also analysed. The stearic acid decomposes part of the zinc dithiocarbamate and it is possible that dimethylamine stearate is formed. In a different experiment it was found that the test was not affected when phenyl-β-naphthylamine was added as anti-ageing agent. The co-operation of B. A . Dogadkin and

SOV/138-58-11-10/14

Determination of Thiuram and its Conversion Products by Conductiometric Titration

A. V. Dobromyslova is acknowledged. There are 2 Tables, 2 Figures and 3 References: 2 German and 1 Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (The Moscow Institute for Chemical Precision Technology, im. M.V. Lomonosov)

Card 3/3

AUTHOR: Dogadkin, B.A., Shershnev, V.A. 69-20-1-20/20

TITLE: The Action of Metallic Oxides in the Vulcanization of Rubber by Tetramethylthiuram Disulfide (Deystviye okislov metallov pri vulkanizatsii kauchuka tetrametiltiuramdisul'fidom)

PERIODICAL: Kolloidnyy Zhurnal, 1958, Vol XX, # 1, pp 124-127 (USSR)

ABSTRACT: In the article, the vulcanization of rubber at 143°C and 100 atm is investigated. The interaction of tetramethylthiuram disulfide with rubber under these conditions leads to its reduction of dimethylthiocarbamic acid, which, with zinc, becomes zinc dithiocarbamate. Figure 1 shows that in the process of vulcanization, part of the sulfur is separated again from the rubber. This separation is caused by the formation of volatile products. In the presence of zinc oxide, the formation of volatile products is considerably reduced. The stable zinc salt causes increased structurization and a fall in the effect of reversal of vulcanization.

There are 4 figures, 1 table, and 6 references, 5 of which are Soviet, 1 German.

Card 1/2

SHERSHNEV, V. A., Candidate Chem Sci (diss) -- "Investigation of the process of vulcanizing rubber with tetramethyl thiuram disulfide without elemental sulfur". Moscow, 1959. 11 pp (Min Higher Educ USSR, Moscow Inst of Fine Chem Tech im M. V. Lomonosov), 150 copies (KL, No 23, 1959, 161)

DOGADKIN, B.A.; SHERSHNEV, V.A.

Reaction of tetramethylthiuram disulfide with rubber and with compounds containing a labile hydrogen atom. Vysokom.soed. 1 no.1:58-67 Ja '59. (MIRA 12:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova.

(Disulfide) (Rubber)

BRESLER, S.Ye.; DOGADKIN, B.A.; KAZBEKOV, E.N.; SAMINSKIY, Ye.M.; SHERSHNEV, V.A.

On the article by B.A.Dogadkin and V.A.Shershnev "The reaction of tetramethylthiuram disulfide with rubber and with compounds possessing a labile hydrogen atom." Vysokom.soed. 2 no.1:174 Ja '60. (MIRA 13:5)

(Rubber) (Vulcanization) (Thiuram disulfide) (Dogadkin, B.A.) (Shershnev, V.A.)

5(4) SOV/69-21-2-20/22

AUTHORS: Dogadkin, B.A., Shershnev, V.A.

TITLE: On the Interaction of Tetramethylthiuram Disulfide and Tetramethylthiuram Monosulfide With Rubber (O vzaimodeystvii tetrametiltiuramdisul'fida i tetrametiltiurammonosul'fida s kauchukom)

PERIODICAL: Kolloidnyy zhurnal, 1959, Nr 2, pp 244-245 (USSR)

ABSTRACT: In order to clarify the character of interaction between rubber and tetramethylthiuram disulfide (TMTD) and tetramethylthiuram monosulfide (TMTM), the authors investigated electronic paramagnetic resonance spectra during the heating process of mixtures of rubber with TMTD and TMTM. The mixtures were prepared on micro-rolls in an argon medium and placed into quartz ampules, which were heated immediately in the resonator (in argon, vacuum or air). At the heating of all mixtures (140°), unique spectra appeared (see graph 2), the least intensive in the mixture with TMTM. This shows that the interaction mechanism of TMTD and TMTM with rubber, probably is common, whereas the kinetic

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On the Interaction of Tetramethylthiuram Disulfide and Tetramethylthiuram Monosulfide With Rubber.

characteristics differ considerably. This is proved by the reaction of TMTD and TMTM with geraniol, which can be considered as a model of the structural units of natural rubber. At the heating of the mixtures TMTD and TMTM with geraniol, and also at their treatment with ultraviolet rays in a quartz ampule at room temperature, they acquire a unique red-orange coloring, the intensity of which increases more slowly in mixtures with TMTM. The facts set forth by the author permit the conclusion, that TMTM and TMTD interact with rubber through a stage of free radicals, and disintegrate according to the bonds C - S and S - S. There are 2 graphs and 7 references, 2 of which are Soviet, 3 German and 2 English.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M.V. Lomonosov)

SUBMITTED: September 3, 1956

Reversion Phenomena in the Vulcanization of Rubber With Tetramethylthiuramdisulfide

S/190/60/002/004/006/020
B004/B056

rubber or SKI-rubber was vulcanized with tetramethylthiuramdisulfide without metallic oxides or in the presence of magnesium- or calcium oxides (Table 1). In this case, the dimethyldithiocarbamic acid decomposes into hydrogen sulfide and dimethylamine. Although this decomposition was observed also in argon, no reversion occurred. In the presence of ZnO, reversion occurs neither in air nor in argon, because the dimethyldithiocarbamic acid is bound as zinc salt. Zinc increases also the stability of the vulcanizate to aging (Table 2). The authors explain the reversion of rubber vulcanization by destructive oxidation processes which are intensified by the decomposition products of dimethyldithiocarbamic acid, but are prevented by the binding of this acid with zinc. There are 3 figures, 2 tables, and 3 references: 1 Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov)

SUBMITTED: December 24, 1959

Card 2/2

22566

S/190/61/003/005/009/014
B110/B220

15 9000 1436, 2209

AUTHORS: Dogadkin, B. A., Tutorskiy, I. A., Tugov, I. I., Al'tzitser, V. S., Krokhina, L. S., Shershnev, V. A.

TITLE: The chemical modification of vulcanizates. I. The reaction of vulcanizates with styrene, methyl methacrylate, and isoprene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 5, 1961, 729-733

TEXT: The chemical modification of vulcanizates is completely new and hardly mentioned in literature. The purpose of the present paper was to study the chemical modification process caused by copolymerization of the vulcanizates with the monomer. Natural rubber (I) or a mixture of natural rubber and butadiene styrene rubber CKC-30 (SKS-30) (II) were disintegrated to particles of about 1 mm, scrubbed in the Soxhlet with acetone, and filled into a weighed ampulla. The monomer (purified styrene, methyl methacrylate, or isoprene) was added in quantities assuring the uniform swelling of the vulcanizate. Then the ampulla was sealed and heated in

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The chemical...

an oil thermostat. Conversion of monomer and yield in graft polymer were determined by weight. The product of copolymerization was extracted with the hot solvent of the formed homopolymer: methyl ethyl ketone for polystyrene, acetone for polymethyl methacrylate, benzene for polyisoprene. In order to initiate the copolymerization process the vulcanizates were ozonized first of all in a suspension of CCl_4 to introduce functional (probably peroxide) groups. One has made use of the ozonizer developed by the Kafedra gazovoy elektrokhimii MGU im. Lomonosova (Department for Gas Electrochemistry of the Moscow State University imeni Lomonosov). The experimental temperatures were: 60, 100, 110, 150, and 180°C. The curves of kinetic copolymerization of non-ozonized I and II are represented in Figs. 2a and 6. In case the vulcanizate had been ozonized previously, a large fraction of the isoprene added polymerized already at 60°C. A considerable part of the polymerized isoprene forms with the vulcanizate a graft polymer (Fig. 6). Also for the copolymerization of methyl methacrylate with vulcanizate, its previous ozonizing raises the reaction rate and yield in graft polymer (Fig. 7). The active centers of the rubber existing in the vulcanizate (double bonds and α-methylene groups)

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The chemical...

are able to act as branching points in the chain of the trimeric polymer and, thus, form the graft polymer. Moreover, the initial polymerization may be effected by oxygen-containing groups existing on the surface of the crushed vulcanizate. The surface increase effected by absorption of monomers on the crushed polymerizate also accelerates the reaction. When polymerizing the non-ozonized vulcanizates with styrene at 150-180°C, the polymerization reaches its maximum already after the first 2 to 3 hr and then remains constant, since the thermopolymerization of styrene is practically completed. With a decrease in temperature of polymerization the yield in copolymers increases as compared to the total monomer polymerized. Yu. M. Yemel'yanov assisted in the experiments. There are 7 figures and 8 references: 3 Soviet-bloc and 5 non-Soviet-bloc. The two references to English-language publications read as follows:
Ref. 1: R. I. Ceresa, W. F. Watson, Trans. and Proceed 35, 19, 1959.
Ref. 4: I. Green, E. F. Sverdrup, Industr. and Engng. Chem. 48, 2138, 1956.

Card 3/8 4

22566
S/130/61/003/005/009/014
B110/B220

The chemical...

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. Lomonosova (Moscow Institute of Fine Chemical Technology imeni Lomonosov) Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh materialov i iskusstvennoy kozhi (All-Union Scientific Research Institute of Film Materials and Artificial Leather)

SUBMITTED: July 25, 1960

Fig. 2: kinetics of copolymerization: Legend: a) Vulcanizate of natural rubber with styrene; б) vulcanizate of natural + SKC-30 rubber with styrene. Full-line curves = styrene conversion; broken-line curves = yield in graft polystyrene. Temperature of polymerization: 1) = 110°C; 2) = 150°C; 3) = 180°C. c) time of polymerization, hr.

Card 4/8 4

26291
S/074/61/030/008/002/002
B117/3296

15 9170

AUTHORS: Dogadkin, B. A., and Shershnev, V. A.

TITLE: Vulcanization of rubbers in the presence of organic accelerators

PERIODICAL: Uspekhi khimii, v. 30, no. 8, 1961, 1013 - 1049

TEXT: The present paper was written to complete the survey by D. Craig (Ref. 1: Rubb. Chem. Techn., 30, 1291 (1957)) in which the Soviet, German, and Japanese papers of the last ten years were not considered. When studying the vulcanization the following problems were dealt with: Elementary chemical reactions of vulcanization, mode of action of the accelerators, nature of vulcanization structures and their effect upon the physicochemical properties of the vulcanization product. For solving these problems both special chemical-analytical procedures and physical methods are used, viz., the optical and electron spectroscopy, isotopic exchange and kinetic studies by radioactive sulfur. Notable results could be obtained in the investigation of the reaction of sulfur with low-molecular model compounds. Two kinds of studies were made: Some of the authors ex-

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Vulcanization of rubbers in ...

plained the structural changes of rubber during vulcanization mainly by the radical processes. Other scientists consider the elementary reactions as proceeding according to a polar (ionic) mechanism. The different opinions on the vulcanization mechanism do not permit a uniform conception of this complex phenomenon. The reaction mechanism depends on various factors: On the thermodynamic reaction conditions, on the rubber type, and, especially, on the types of accelerator and activator. At present, several vulcanization systems are used: (a) Vulcanization with di- and polysulfides which comprises the following methods: Vulcanization with di-2-benzothiazyl disulfide; vulcanization with sulfur in the presence of di-2-benzothiazyl disulfide; vulcanization with thiuram disulfides; vulcanization with sulfur in the presence of thiuram disulfides and dithio carbamates. (b) Vulcanization in the presence of mercapto-benzothiazole. (c) Vulcanization in the presence of sulfonamides. (d) Vulcanization in the presence of organic bases. Furthermore, papers are discussed which concern the following problems: Effect of binary sytems of vulcanization accelerators; structure and activity of vulcanization accelerators; effect of the rubber structure upon its vulcanizability; the part played by vulcanization activators; crosslinking (vulcanization) of rubber solutions at low temperatures; re-

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versibility and the optimum of vulcanization; vulcanization structures and their effect upon the static and dynamic properties and the fatigue of vulcanization products. The following authors are mentioned: S. Ye. Bresler, I. A. Tutorskiy, G. A. Blokh, Ye. N. Gur'yanova, I. Beniska, E. N. Belyayeva, Z. N. Tarasova, A. S. Kuz'minskiy. There are 22 figures, 2 tables, and 112 references: 57 Soviet and 55 non-Soviet. The three most important references to English-language publications read as follows: Ref. 1: D. Craig, Rubb. Chem. Tehn., 30, 1291 (1957); J. R. Shelton, E. T. McDonel, Lecture at the International Conference on Caoutchouc and Resin, Washington, November 9 - 14, 1959; L. Bateman, R. W. Glasebrook, C. G. Moore, M. Porter, G. W. Ross, R. W. Sawille. Rub. Chem. Techn., 31, 1055 (1958).

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov)

DOGADKIN, B.A ; SHENSHNEV, V.A.

Vulcanization of rubbers in the presence of organic accelerators.
Usp.khim. 30 no.8:1013-1049 Ag '61. (MIRA 14:9)

1 Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.
(Vulcanization)

L 12684-63 EPR/EEF(c)/EWP(j)/EWT(m)/BDS AFFTC/ASD Pz-4/Pc-4/Pr-4 RM/WW
ACCESSION NR: AP3001594 S/0138/63/000/005/0020/0023

AUTHOR: Shershnev, V. A.; Ginsburg, L. V.; Dogadkin, B. A.

TITLE: Kinetics of vulcanized rubber structuration by phenol-formaldehyde derivates

SOURCE: Kauchuk i rezina, no. 5, 1963, 20-23

TOPIC TAGS: kinetics of structuration, vulcanized rubber, phenol-formaldehyde derivate, methylol group

ABSTRACT: The study was conducted on natural rubber as well as on synthetic rubbers SKS-30-AM and SKS-30-1, which were heated with rolling at 160 and 180C with 2,6-dimethylol-4-butylphenol and the resin 101, a p-butylphenol-formaldehyde oligomer. Two types of mixtures were used, each containing 12% of resin 101, while only one of them contained 3% of stannous chloride. The resulting products were characterized by low break test values, especially in the absence of stannous chloride. In another series of experiments, 12, 3, and 1 parts of 2,6-dimethylol-4-butylphenol and 3% stannous chloride were added to natural rubber under similar conditions. These produced vulcanized rubbers of a higher break test, as compared with resin 101, which was not adversely affected by

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L 12684-63
ACCESSION NR: AP3001594

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aging. The authors conclude that the effectiveness of a vulcanizing agent[15] may be related to the number of methylol groups contained therein, which are responsible for the formation of cross links. Orig. art. has: 3 charts and 2 tables.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonsova (Moscow Institute of Advanced Chemical Technology)

SUBMITTED: 00	DATE ACQ: 08Jul63	ENCL: 00
SUB CODE: 00	NO REF SOV: 004	OTHER: 006

Card 2/2

SHERSHNEV, V.A.; GINZBURG, L.V.; DOGADKIN, B.A.

Behavior in the stretching of natural rubber vulcanizates with p-tert-butyldimethylolphenol. Koll.zhur. 25 no.5:626-627 S-O '63. (MIRA 16:10)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.Lomonosova.

GINZBURG, L.V.; SHERSHNEV, V.A.; DOGADKIN, B.A.

Interaction of 2,6-dimethylol-4-tert-butylphenol with unsaturated elastomers. Dokl. AN SSSR 152 no.2:335-337 S '63. (MIRA 16:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova. Predstavleno akademikom A.A. Balandinym.

L 19612-65 EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/EWA(h)/EWA(1) Pc-4/Pr-4/Pu-4/Peb GG/RM/MLK

ACCESSION NR: AT4049862 S/0000/64/000/000/0233/0236

AUTHOR: Dogadkin, B.A., Shershnev, V.A., Boyarchuk, Yu. M., Dudenkova, S.V.

TITLE: The problem of the role of metal oxides in the vulcanization of rubber in the presence of tetramethylthiuramdisulfide

SOURCE: Khimicheskiye svoystva i modifikatsiya polimerov (Chemical properties and the modification of polymers); sbornik statey. Moscow, Izd-vo Nauka, 1964, 233-236

TOPIC TAGS: metal oxide, rubber vulcanization, tetramethylthiuramdisulfide, free radical reaction, radiation yield, transverse bond

ABSTRACT: An attempt was made to track the course of free-radical reactions during irradiation of natural rubber and to clarify the role in these processes of additions of tetramethylthiuramdisulfide (TMTD) and metal oxides. The addition of TMTD increased the radiation yield of radicals per 100 ev from 0.6 to 1.3, which may be explained by the transfer of energy during irradiation; the number of transverse bonds per 100 ev increased from 0.9 to 1.1. Oxides of Zn and Bi decreased the yield to 0.4, but raised the number of transverse bonds to 3.2 and 3.7, in the presence of TMTD, the numbers were 3.2 and 3.7, respectively. In the presence of TMTD, MgO and NiO have practically no

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L 19612-65
ACCESSION NR: AT4049862

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effect on the radiation yield, while MgO, in addition, does not affect formation of transverse bonds. The largest number of transverse bonds forms in the systems rubber + TMTD+ZnO and rubber + TMTD + Bi_2O_3 and the smallest - in the systems with additions of NiO and CdO (in comparison with the system rubber + TMTD). The different effect of metal oxides on the radiation cross-linking of rubber, with and without TMTD, can be related to their effect on the reactions of free radicals which determine the cross-linking of the rubber molecules. "The authors are grateful to N. Ya. Buben for the opportunity to conduct the work."

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosava, (Moscow Institute of Fine Chemical Technology) Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 16Feb63 ENCL: 00 SUB CODE: MT

NO REF SOV: 007 OTHER: 002

Card 2/2

L 25264-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 WW/RM
ACCESSION NR: AP5002920 S/0138/65/000/001/0009/0012

AUTHOR: Ginzburg, L.V.; Shvarts, A.G.; Shershnev, V.A.; Dogadkin, B.A.

TITLE: Vulcanization of carboxylated rubber with alkylphenol-formaldehyde resin

SOURCE: Kauchuk i rezina, no. 1, 1965, 9-12

TOPIC TAGS: vulcanization, carboxylated rubber, synthetic rubber, phenol formaldehyde resin, alkylphenol polymer, butadiene styrene rubber, methacrylate copolymer, vulcanizate crosslinking, vulcanizate mechanical property, metal oxide, thiuram, oxide filler

ABSTRACT: Vulcanization of SKA-30-1, a carboxylated 70:30 butadiene-styrene copolymer with 1.25% methacrylic acid, was studied with alkylphenol-formaldehyde resin as a vulcanizer in the presence and absence of zinc or magnesium oxides to define the effect of the metal oxides on crosslinking and on the mechanical properties and fatigue strength of vulcanizates. Vulcanizates, prepared with 8% resin and 3% magnesium or zinc oxide, without or with admixture of 2% stearic acid, 50% carbon black, KhAF 10% oil extender NP-6, 1% paraffin wax and 2% rosin, were tested for cross-linking by swelling tests and for elasticity, tensile strength, relative elongation and strength after multiple deformation. Vulcanizates with "thiuram" and vulcanizates of SKS-30ARK (modified, 70:30 butadiene-styrene, copolymerized at 5C with rosin soap emulsifier obtained under similar conditions

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L 25264-65
ACCESSION NR: AP5002920

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were also tested. Alkylphenol-formaldehyde resin was shown to have good activity as a curing agent of carboxylated butadiene-styrene rubber, particularly in the presence of zinc oxide. Magnesium oxide decreased the crosslinking effect. The filled and resin-cured SKS-30-1 had better physical-mechanical properties than thiuram-cured rubber and particularly higher resistance to wear and fatigue. The resin-vulcanized SKS-30-1 rubber showed also less tendency to scorching than conventional SKS-30-1 tire tread mixture and approximately equal physical-mechanical properties. Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova (Moscow fine-chemical technology institute); Nauchno-issledovatel'nyy institut shinnoy promyshlennosti (Tire industry scientific research institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 005 OTHER: 002

Card 2/2

L 43099-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL WW/RM
ACCESSION NR: AP5008365 S/0190/65/007/003/0417/0419

AUTHORS: Al'tzitser, V. S.; Gul', V. Ye.; Tutorskiy, I. A.; Shershnev, V. A.; Dogadkin, B. A.

TITLE: Copolymerization of ozonated pulverized vulcanizers with polyacrylate esters

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 3, 1965, 417-419

TOPIC TAGS: rubber, copolymerization, ozone, vulcanizer, resin/ SKI vulcanizer, NK vulcanizer, SKS 30 ARM vulcanizer, SKB vulcanizer, SKD vulcanizer

ABSTRACT: This article, the third of the series "Chemical Modification of Vulcanizers," presents data from an investigation of the interaction between ozonated pulverized vulcanizers and polyacrylate esters. Vulcanizers SKI, NK, SKS-30 ARM, SKB, and SKD, and polyester resin MGF-9 were tested. Figure 1 shows the amount of peroxides formed by ozone and various vulcanizers. These peroxide groups, though stable at room temperature, readily decompose upon heating, and apparently form free radicals, initiating polymerization. Heating of ozonized pulverized vulcanizers with polyester resin causes the hardening of the mixture. Modified products formed during the latter process show properties common to both substances, the elastic vulcanized rubber, and the oil-, gasoline-, and heat-resistant polyacrylate ester.

Card 1/2

L 43099-65
ACCESSION NR: AP5006365

The authors postulate that the vulcanizate particles are bound chemically with the polyacrylate ester molecules, forming a composite three-dimensional polymer structure. Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: 06May64 ENCL: 01 SUB CODE: OC, MT

NO REF SOV: 003 OTHER: 000

Card 2/3

GINZBURG, L.V.; CHVARTS, A.G.; SHERSHNEV, V.A.; DOGADKIN, B.A.

Vulcanization of carboxyl-containing rubber with alkylphenol-formaldehyde resin. Kauch.i rez. 24 no.1:9-12 Ja '65.
(MIRA 18:3)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.Lomonosova i Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

L 56672-65 EWT(m)/EWP(j) Pc-4 RM

ACCESSION NR: AP5017842

UR/0286/65/000/011/0078/0078
678.043:547.412.74

AUTHOR: Shershnev, V. A.; Sidnev, V. A.; Dogadkin, B. A.

TITLE: A method for vulcanizing rubber. Class 39, No. 171568

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 78

TOPIC TAGS: rubber vulcanization, thiourea

ABSTRACT: This Author's Certificate introduces a method for vulcanizing rubber using polyhalide compounds. Volatility and nonuniformity in mixing the vulcanizing agent are eliminated by using a complex compound of hexachloroethane and thiourea.

ASSOCIATION: none

SUBMITTED: 19Mar64 ENCL: 00 SUB CODE: MT ,GC

NO REF SOV: 000 OTHER: 000

Card 1/1

L 56671-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM

ACCESSION NR: AP5017844

UR/0286/65/000/011/0079/0079
678.7.028.294.044 :
547.563.3

23
B

AUTHOR: Ginzburg, L. V.; Shershnev, V. A.; Shvarts, A. G.; Dogadkin, B. A.; Neratova, T. N.

TITLE: A method for vulcanizing rubber. Class 39, No. 171570

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 79

TOPIC TAGS: rubber vulcanization, vulcanization acceleration

ABSTRACT: This Author's Certificate introduces a method for vulcanizing rubber using alkylphenolformaldehyde resins in the presence of accelerators of halide-containing organic substances. The vulcanization process is intensified by using 2,6-dibromodimethyl-4-*tert*-butylphenol as the halide-containing organic substance.

ASSOCIATION: none

SUBMITTED: 19Mar64 ENCL: 00 SUB CODE: MT, GC

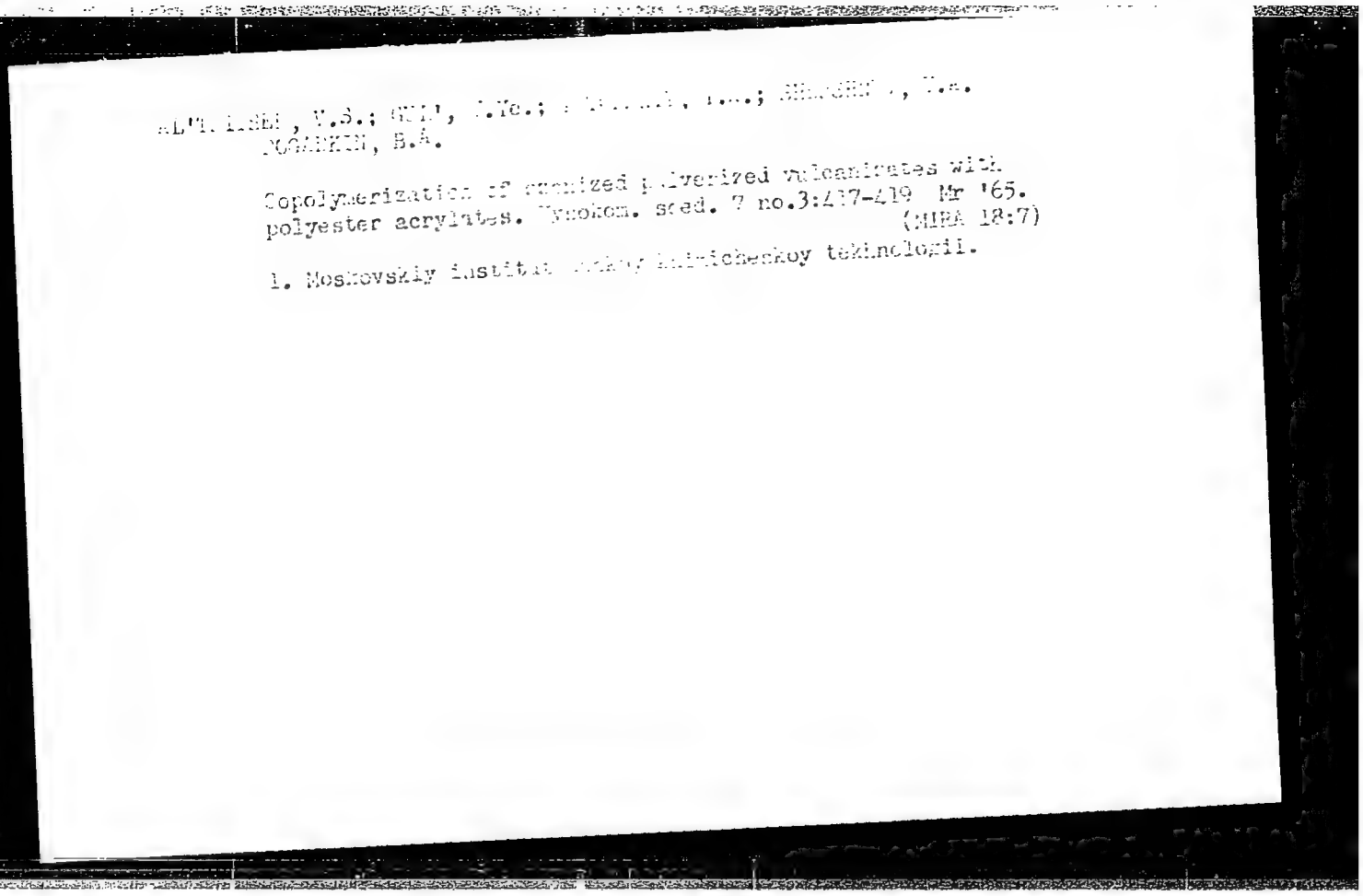
NO REF SOV: 000 OTHER: 000

Card 1/1

[illegible], LEBEDEV, V.A.; [illegible], V.I.; [illegible], B.A.

Reaction of unsaturated elastomers with alkyl phenol-formaldehyde resins under vulcanization conditions. Vysokom.soed. 7 no.1: 56-62 Ja '65. (MIRA 18:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni [illegible].



[illegible], V.S.; [illegible], L.Ye.; [illegible], L...; [illegible], T.A.
KOZLOVSKIY, B.A.

Copolymerization of crushed pulverized vulcanizates with polyester acrylates. Kauch. i rez. 7 no.3:417-419 Mr '65. (MIRA 18:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii.

L 23532-66 EWP(j)/EWT(m) IJP(c) RM
ACC NR: AF6007855 (A) SOURCE CODE: UR/0138/66/000/002/0015/0018

AUTHOR: Sidnev, V. A.; Anupyl'd, O. L.; Dogadkin, B. A.; Shershnev, V. A. 39

ORG: Institute of Fine Chemical Technology im. M. V. Lomonosov, Moscow (Moskovskiy institut tonkoy khimicheskoy tekhnologii) B

TITLE: Crosslinking of caoutchouc by polyhalide compounds of the aliphatic series

SOURCE: Kauchuk i rezina, no. 2, 1966, 15-18

TOPIC TAGS: rubber, synthetic process, heat resistance, vulcanization, organic

ABSTRACT: The use of hexachlorethane and 1,1,1.5-tetrachloropentane as vulcanizing agents made it possible to produce heat-resistant vulcanized rubber having high physico-mechanical properties. The molecular compound of hexachloroethane with tetrachloropentane (15:85), called vulkaton (SSSR Patent no. 165300, of 23 Sept 1963), and combination of tetrachloropentane with DFG (5 and 2 parts by weight respectively) were the most efficient vulcanizing substances. Both chemical and salt crosslinkages were formed during vulcanizing caoutchouc SKS-30-1 with tetrachloropentane. Vulcanization was practically absent at temperatures ≦153C. An addition into the mixture of a small amount of DFG or an increase of temperature to 163C accelerated the vulcanization considerably. Similar results were obtained for caoutchouc of other types. Cross-

Card 1/2 UDC: 678.7:678.028:547:412.13

L 23532-66

ACC NR: AP6007855

linking in caoutchuk SKS-30-1 was not affected by 1,1.5 trichloropentane-1, (product of the dehydrochlorization of tetrachloropentane). A. N. Nesmeyanov et al. (Usp. khim., 25, vyp. 6, 665, 1956) showed that tetrachloroalkane had a tendency toward dehydrochlorization while forming trichloroalkanes. Therefore, the vulcanizing of chloroalkanes was related to the presence in them of trichloromethyl groups. The fact that N and Cl did not link with caoutchouc during vulcanizing by tetrachloropentane with VFG and that the trichloroalkanes did not vulcanize suggested that vulcanization was related to the liberation of HCl from the tetrachloropentane. Orig. art. has: 3 fig.

SUB CODE: 07,11/ SUBM DATE: 28Oct64/ ORIG REF: 007/ OTH REF: 003

Card 2/2

L 24483-66 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6006988 SOURCE CODE: UR/0190/66/008/002/0357/0360

AUTHORS: Ginzburg, L. V.; Shvarts, A. G.; Shershnev, V. A.; Neratova, T. N. 28 B

ORG: Moscow Institute of Fine Chemicals Technology im. M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Vulcanization of rubber with products of hydrohalogenation of phenol dimethylol derivatives

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 2, 1966, 357-360

TOPIC TAGS: vulcanization, rubber, chemical reaction kinetics, tracer study

ABSTRACT: Vulcanization of rubber with 2, 6-dibromodimethyl-4-tert-butylphenol (I) and 2, 6-dichlorodimethyl-4-tert-butylphenol (II) was investigated. It was hoped that the reactivity of I and II would prove high enough to make the use of accelerators unnecessary. Compounds I (m.p. 71C) and II (m.p. 68C) were synthesized by passing the corresponding hydrogen halide through a solution of 2,6-dimethylol-4-tert-butylphenol in glacial acetic acid. The kinetics of vulcanization was investigated by using labeling techniques. It was established that the process of vulcanization occurs in two stages: 1) addition, and 2) formation of cross-links.

Card 1/2 UDC: 678.01:54+678.41

L 24483-66

ACC NR: AP6006988 O

Under the temperature conditions required, the vulcanization is accompanied by evolution of hydrogen halide (60% at 140C) which serves as a "built-in" accelerator of vulcanization. Mechanistic explanations of the reactions are offered. Orig. art. has: 5 figures, 1 equation, and 1 formula.

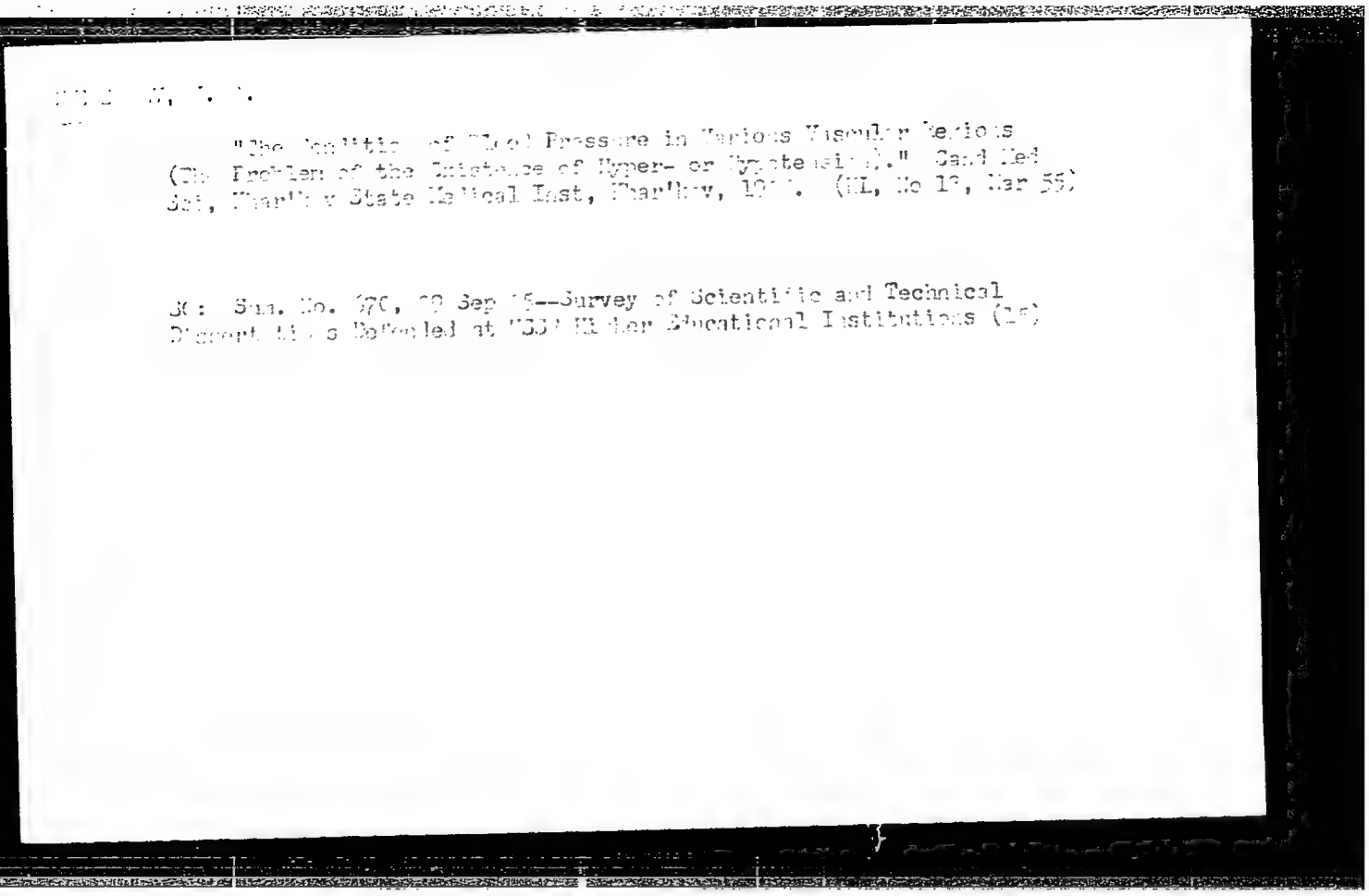
SUB CODE: 07, 11/ SUBM DATE: 24Mar65/ ORIG REF: 005/ OTH REF: 001

Card 2/2 PB

SHERSHNEV, V.G., DUBINSKIY, A.A.

"Some Data on theDistribution of Radiophosphorus in theBlood of Patients who have been Treated with this Preparation" p. 264, in the book Experience in the Use of Radioactive Isotopes in Medicine R. Ye. KAVETSKIY and I.T. SHEVCHENKO, publishing House of the UKRAINIAN SSR, KIEV 1955, represents medical transactions of conference held in KIEV from 18-20 January 1954.

So: 1100235



"The Lability of Blood Pressure in Various Vascular Regions (The Problem of the Existence of Hyper- or Hypotension)." Sand Med Sat, Pharm State Medical Inst, Pharmacy, 19[illegible]. (ML, No 13, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

DUBINSKIY, A.A., kand.med.nauk; SHERSHNEV, V.G., kand.med.nauk

Thyroid function test with radioactive iodine in peptic ulcer.
Terap.arkh. 29 no.2:76-78 '57. (MIRA 11:1)

1. Iz kafedry fakul'tetskoy terapii lechebnogo fakul'teta (zav. - prof. S.Ya.Shteynberg) Khar'kovskogo meditsinskogo instituta.
(PEPTIC ULCER, physiology,
thyroid radioiodine funct. test (Rus))
(IODINE, radioactive,
thyroid funct. test in peptic ulcer (Rus))
(THYROID GLAND, function tests,
radioiodine, in peptic ulcer (Rus))

SHERSHNEV, V.G., dotsent

Use of oxyhemography in the determination of the intensity of tissue gas exchange. Vrach. delo no.12:31-34 D '63. (MIRA 17:1)

1. Kafedra fakul'tetskoy terapii (zav. - prof. S.Ya. Shteynberg) lechebnogo fakul'teta Khar'kovskogo meditsinskogo instituta.

117-58-6-9/36

AUTHORS: Balats, D.S., Shershnev, V.P., Morozov, I.L., Engineers

TITLE: Increasing the Wear Resistance of the Bearing Settings in the Frames of Face Machines (Povysheniye iznosostoykosti posadochnykh mest pod podshipniki v korpusakh zaboynykh mashin)

PERIODICAL: Mashinostroitel', 1958, Nr 6, pp 19-20 (USSR)

ABSTRACT: The worn bearing-settings in face machines were repaired formerly in the following way: a 5-mm layer of the metal was removed, and then new metal fused-on by means of the TsM-7 electrodes. This new metal is then machined. The process of repairing the setting in this way is very difficult. In the Rutchenkovsk Plant imeni N.S. Krushchëv two apparatuses (Figure 2-3) were developed: a floating reamer and a floating roller. The repair process is now carried out in the following way: electric fusing on the worn surface; rough boring with an allowance of 0.15-0.25 mm; clean boring (with the reamer) with an allowance of 0.01-0.25 mm; finishing by means of the special floating roller. This method is used for repairing settings under the bearings with a diameter of 90-220 mm. The

Card 1/2

SHERSHNEV, Yevgeniy Grigor'yevich; PANKOVA, V.M., redaktor; KIRSANOVA, N.A., tekhnicheskiy redaktor

[Resources of the entire organized group] Silami vsego kollektiva. [Moskva] Izd-vo VTsSPS Profizdat, 1956. 39 p. (MLRA 9:10)

1. Master Moskvoskogo zavoda imeni Vladimira Il'icha.
(Efficiency, Industrial)

SHERSHNEV, Yevgeniy Sergeyevich; CHISTOV, V.V., red.; KAKHOVSKAYA, O.G., red.izd-va; GURKIN, V., tekhn.red.

[Economy and foreign trade of the Federal Republic of Germany] Federativnaia Respublika Germanii; ekonomika i vneshniaia torgovlia. Moskva, Vneshtorgizdat, 1960. 183 p. (MIRA 14:2)

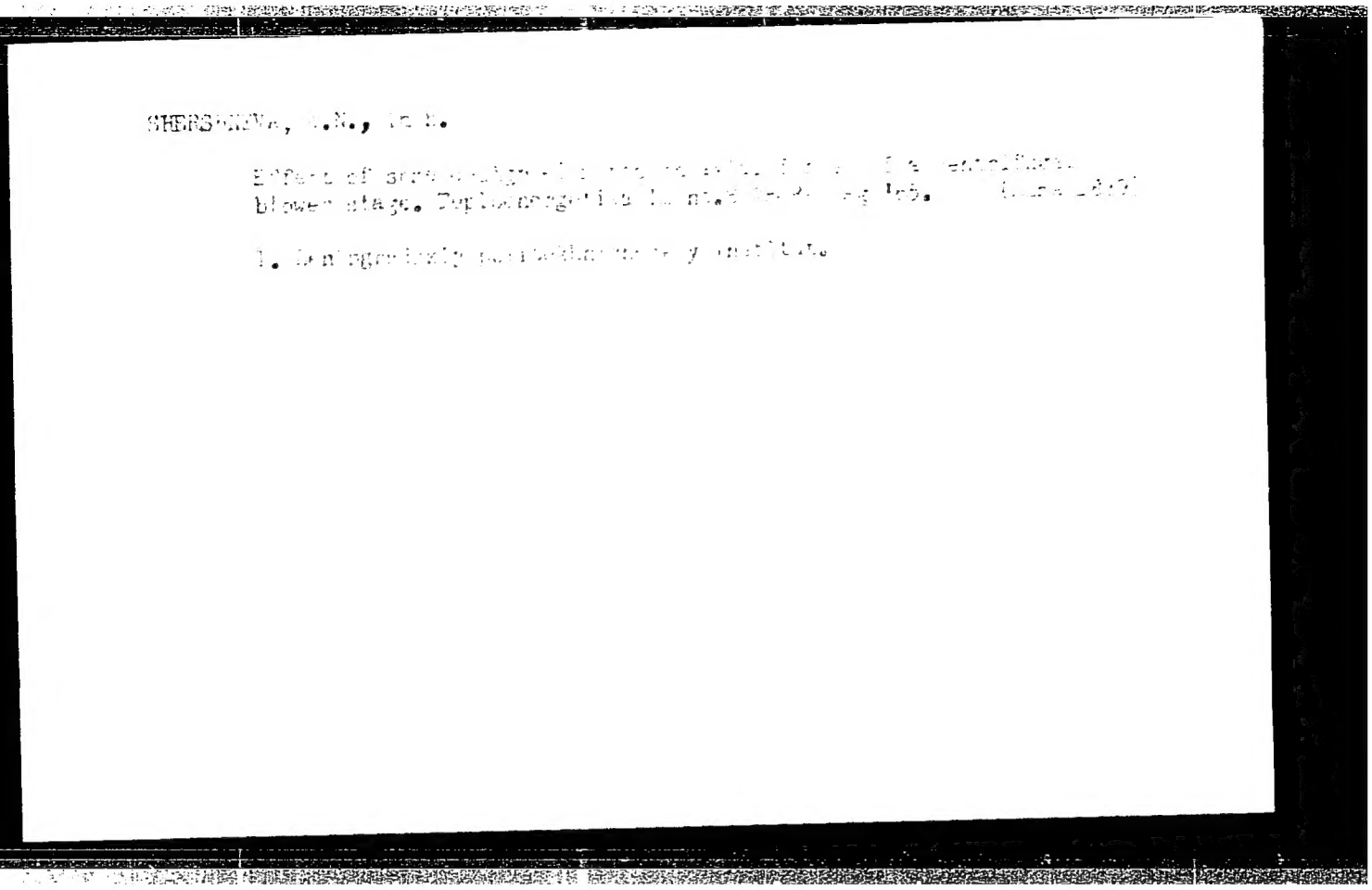
(Germany, West--Economic conditions)

LUKASHEVICH, G.I [Lukashevych, H.I.], kand. tekhn. nauk; SHERSHNEV, Ye.S. [Shershn'ov, IE.S.]; SKVARIK, V.P. [Skvaryk, V.P.], kand. tekhn. nauk

Ways to lengthen the service life and improve the reliability of machinery in light industries. Leh. prom. no.1:28-32 Ja-Mr '65. (MIRA 18:4)

TRUKHANOVSKIY, D.S.; SHERSHNEVA, A.I.

Cultivation of the Amur cork tree by seed. Biul. Inst. biol. AN BSSR no.6:49-55 '61. (MIRA 15:3)
(WHITE RUSSIA—AMUR CORK TREE)



S/114/63/000/004/001/005
A004/A127

AUTHORS: Ris, V.F., Den, G.N., Candidates of Technical Sciences, Shershneva, A.N., Engineer

TITLE: The effect of flow on the runner of the centrifugal stage

PERIODICAL: Energomashinostroyeniye, no. 4, 1963, 14 - 17

TEXT: The authors analyze a force system which is applied to the runner of single-stage centrifugal force pumps with a shell located immediately behind the runner. They point out that such a layout of the shell results inevitably in a disturbance of the axial symmetry of flow, which can be confirmed by a simple qualitative analysis of the flow in the shell. Calculating the stress acting on the runner in the absence of an axial symmetry of flow round the wheel and the pressure changes near the runner along the periphery and radius, the authors present appropriate formulae and experimental data characterizing the aerodynamic stress acting on the runner. There are 6 figures and 1 table.

Card 1/1

SHERCHEVA, A. N.

Characteristics of pseudokarst relief forms in the southern regions of Pskov Province. Izv. Vses. geog. ob-va 96 no. 2:133-136 Mr-Ap '64. (MIRA 17:9)